

**FINAL EXPRESS TERMS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
REGARDING THE ADOPTION BY REFERENCE OF THE  
2006 EDITION OF THE UNIFORM PLUMBING CODE (UPC) WITH PROPOSED AMENDMENTS  
INTO THE 2007 CALIFORNIA PLUMBING CODE (CPC)  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5**

---

The Department of Housing and Community Development (HCD) proposes to adopt the 2006 edition of the Uniform Plumbing Code (UPC) for codification and effectiveness into the 2007 edition of the California Plumbing Code (CPC) as presented on the following pages, including any necessary amendments. HCD further proposes to:

- Repeal the 2000 edition of the Uniform Plumbing Code;
- Repeal amendments to the model codes that are no longer necessary, repeal or amend building standards that are not addressed by a model code;
- Relocate or codify existing adopted and necessary amendments to the model code into the format of the model code proposed for adoption, the action of which has no regulatory effect; adopt new necessary amendments to the model code proposed for adoption; and/or
- Adopt new building standards that are not addressed by the model code proposed for adoption

---

**LEGEND FOR EXPRESS TERMS:**

1. **Existing California amendments or code language being modified:** All such language appears in *italics*, modified language is underlined or shown in ~~strikeout~~.
  2. **New UPC language with new California amendments:** UPC language shown in normal Arial 9 point; California amendments to UPC text shown underlined and in italics.
  3. **Repealed text:** All such language appears in ~~strikeout~~.
  4. **Amended, adopted or repealed language after public hearing:** Amended, adopted, or repealed language will appear in double underline and ~~double strikeout~~.
  5. **Non-substantive editorial revisions:** All such revisions shown in **yellow highlight** and *italics*. Modified language is underlined or in ~~strikeout~~.
  6. **Notation:** Authority and Reference citations are provided at the end of each chapter.
- 

**HCD PROPOSES TO REPEAL EXISTING AMENDMENTS AND/OR CALIFORNIA BUILDING STANDARDS NOT ADDRESSED BY MODEL CODES THAT ARE NO LONGER NECESSARY AS FOLLOWS:**

**REPEALED AMENDMENTS:**

~~**101.1.2 [For HCD 1 & HCD 2] California Plumbing Code.** This document shall be known as the "California Plumbing Code." Where a reference to the Uniform Plumbing Code or UPC appears in the text of this code, the reader shall understand the reference to be to the California Plumbing Code at Part 5 of Title 24, California Code of Regulations. The provisions contained in the California Plumbing Code of the (compiled) California Building Standards Code as defined in Section 18910, Health and Safety Code, may be cited as such and are referred to hereafter as "these regulations", "these plumbing standards" or "this code".~~

~~**101.2.2 [For HCD 1 & HCD 2] California Purpose.** To provide minimum standards to safeguard life or limb, health, property and public welfare, and protect against hazards that may arise from the use of plumbing piping and systems by regulating and controlling the design, construction, installation, quality of materials, location and operation of plumbing piping systems within the State of California.~~

**~~101.4.0 [For HCD 1 & HCD 2] Application.~~** The provisions of this code shall apply to the construction, alteration, moving, demolition, repair and use of all plumbing, gas, or drainage piping and systems or water heating or treating equipment in or on any building or structure or outdoors on any premises or property.

**~~101.4.1.1.1.1 [For HCD 1 & HCD 2]~~** Any plumbing system may have its existing use, maintenance or repair continued when the administrative authority determines that its use, maintenance or repair is in accordance with the original design and no hazard to the public health, safety or welfare has been created by such system.

**~~101.4.1.1.2.1 [For HCD 1 & HCD 2]~~** Existing building sewer and building drains may be used in connection with plumbing alterations or repairs if such sewer or drains have been properly maintained and were installed in accordance with the applicable laws in effect at the time of installation. Any plumbing system existing on January 1, 1975, shall be deemed to have conformed to applicable law in effect at the time of installation and to have been maintained in good condition if currently in good and safe condition and working properly.

**~~101.4.1.1.3.1 [For HCD 1 & HCD 2]~~** Effective January 1, 1990, in new construction and those existing facilities for which occupancy type are listed in Tables 4-1 and 4-4 for public use, which apply for a permit to undertake construction, structural alterations, repairs or improvement which exceed 50 percent of the square footage of the entire facility, shall install water closets, urinals, lavatories and drinking fountains as stipulated in Tables 4-1 and 4-4 for public use. Community and/or municipal parks with a bleacher capacity not exceeding 500 seats shall be exempt from the requirements of this Section and Tables 4-1 and 4-4.

**~~Note 1: [For HCD 1 & HCD 2]~~** Each public restroom shall comply with Chapter 16 11B of the California Plumbing Building Code, (California Code of Regulations, Title 24, Part 5 2 ).

**~~101.4.1.4.2 [For HCD 1/AC & HCD 2] Conflicts Between Codes.~~** When the requirements of this code conflict with the requirements of the California Mechanical Code, Title 24, Part 4, the California Mechanical Code shall prevail.

**~~101.4.4 [For HCD 1 & HCD 2] Effective Date.~~** One hundred and eighty days after the date of publication, or as otherwise noted herein.

**~~101.4.4.1 [For HCD 1 & HCD 2]~~** The applicable subsection of Health and Safety Code Section 18938 is repeated here for clarity and reads as follows:

**~~Section 18938 (b)~~** The building standards contained in the Uniform Fire Code of the International Conference of Building Officials and the Western Fire Chiefs Association, Inc., the Uniform Building Code of the International Conference of Building Officials, Appendix Chapter 1 of the Uniform Code for Building Conservation of the International Conference of Building Officials, the Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials, the National Electrical Code of the National Fire Protection Association, and the Uniform Mechanical Code of the International Conference of Building Officials and the International Association of Plumbing and Mechanical Officials, as referenced in the California Building Standards Code, shall apply to all occupancies throughout the state and shall become effective 180 days after publication in the California Building Standards Code by the California Building Standards Commission or at a later date after publication established by the commission.

**~~101.4.4.2 [For HCD 1 & HCD 2]~~** The provisions of the model code which are adopted by these regulations in this code are applicable to all occupancy groups and uses regulated by this code. The amendments to the model code are applicable only to those occupancies or uses which the State agency adopting the amendments is authorized to regulate as listed in Section 101.11.

**~~101.5.1.1 [For HCD 1] Additions, Alterations or Repairs.~~** The alteration, repairs, replacement, occupancy, use and maintenance provisions are superseded, in part, by "The State Housing Law, Health and Safety Code", Division 13, Part 1.5, Sections 17912, 17920.3, 17922 (C), 17958.8 and 17958.9 and California Code of Regulations, Title 25, Chapter 1 (commencing with Article 1). For clarification purposes Health and Safety Code Section 17958.8 is repeated here for clarity and reads as follows:

**~~Section 17958.8~~** Local ordinances or regulations governing alterations and repair of existing buildings shall permit the replacement, retention, and extension of original materials and the use of original methods of construction as long as the hotel, lodging house, motel, apartment house, or dwelling, or portions thereof, or building and structure accessory thereto, complies with the provisions published in the State Building Standards Code and the other rules and regulations of the department or alternative local standards adopted pursuant to Section 17920.7 and does not become or continue to be a substandard building.

**101.5.6 Moved Buildings.** Plumbing systems which are part of buildings or structures moved into this jurisdiction shall comply with the provisions of this Code for new installations except as provided for in Section 103.5.5.2.

**101.5.6.2 [For HCD 1] Moved Buildings.** ~~Moving of apartment houses and dwellings. Health and Safety Code Section 17958.9 is repeated here for clarity and reads as follows:~~

~~Section 17958.9 Local ordinances or regulations governing the moving of apartment houses and dwellings shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the apartment house or dwelling complies with the building standards for foundation applicable to new construction, and does not become or continue to be a substandard building.~~

**101.6 [For HCD 1 & HCD 2] Non-Building Regulations.** ~~Requirements contained in the U.P.C., or in any other referenced standard, code, or document which are not building standards as defined in Section 18909, Health and Safety Code, shall not be construed as part of the provisions of this code.~~

**101.7 [For HCD 1 & HCD 2] Order of Precedence.** ~~Where, in any specific case, different Sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. When there is a conflict between a general and a specific requirement, the specific requirement shall apply.~~

**101.8 [For HCD 1 & HCD 2] Format.** ~~This part fundamentally adopts the U.P.C. by reference on a chapter-by-chapter basis. Such adoption is reflected in the adoption tables of each chapter of this part. When the adoption table of a chapter of this part makes no reference to a specific chapter of the U.P.C., is not adopted as a portion of this code.~~

**101.9 [For HCD 1 & HCD 2] Validity.** ~~If any chapter, Section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the State as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.~~

**101.10.1 [For HCD 1 & 2 HCD 1 & HCD 2]** ~~The codes, standards and publications, adopted and set forth in this code, including other codes, standards and publications referred to therein, by title and date of publication, are hereby adopted as standard reference documents of this code.~~

**101.10.2 [For HCD 1, HCD 1/AC, HCD 2 & HCD 2/SFM For HCD 1 & HCD 2]** ~~When this code does not specifically cover any subject relating to building design and construction, recognized fire prevention engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Protection Association may be used as authoritative guides in determining recognized fire prevention engineering practices.~~

**101.11 [For HCD 1, HCD 1/AC & HCD 2/SFM HCD 2] Application-Vesting Authority.** ~~When adopted by a State agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to that agency by the State Legislature.~~

~~Following is a list of the state agencies that adopt building standards, the specific scope of application of the agency responsible for enforcement, and the specific authority of each agency to adopt and enforce these provisions of building standards of this code, unless otherwise stated.~~

**101.11.8 [For HCD]**

~~HCD—Department of Housing and Community Development.~~

**101.11.8.1 [ For HCD 1 HCD 1]**

**[HCD 1] —Department of Housing and Community Development.**

~~[HCD 1] —Department of Housing and Community Development.~~

~~Application — Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory built housing and any other type of dwelling containing sleeping accommodations with common toilet or cooking facilities. Refer to Section 101.11.1 of this code, Office of the State Fire Marshall~~

**101.11.8.2 [For HCD 1A/C]**

**[HCD 1/AC] —Department of Housing and Community Development Access Compliance.**

~~Application — Whenever the identification “HCD 1/AC” appears in this code, it shall mean the Department of Housing and Community Development requires specific accommodations for “persons with physical disabilities,” as defined in~~

~~Section 1102A.16-P of the California Code of Regulations, Title 24, Part 2, also known as the California Building Code. The application of this code, shall apply only to "Covered Multifamily Dwellings," as defined in Section 1102A.3-C of the California Building Code, including but not limited to the following:~~

- ~~1. Apartment buildings with 3 or more dwelling units.~~
- ~~2. Condominiums with 4 or more dwelling units.~~

~~3. Lodging houses, as defined in Section 213, of the California Building Code, when used as a residence with 3 or more guest rooms.~~

~~4. Congregate residences, as defined in Section 204 of the California Building Code.~~

~~5. Dwellings with 3 or more efficiency units, as defined in Section 205 of the California Building Code or Health and Safety Code Section 17958.1.~~

~~6. Shelters for the homeless not otherwise subject to the disabled access regulations of the Division of the State Architect—Access Compliance (commencing with Section 1111B of the California Building Code).~~

~~7. Dormitories, as defined in Section 205 of the California Building Code.~~

~~8. Time Share Dwellings with 3 or more units, except for condominiums covered in item number 2 above.~~

~~9. Other Group R Occupancies in multifamily dwellings, which are established by the Office of the State Fire Marshal (commencing with Section 310 of the California Building Code).~~

~~The HCD 1/AC disabled access regulations do not apply to the alteration, repair, rehabilitation, or additions to existing Group R Occupancies that were constructed and occupied prior to July 15, 1992. The HCD 1/AC regulations generally do not cover public accommodation occupancies, such as hotels and motels.~~

~~Buildings or portions of buildings of the same or similar occupancies, or mixed occupancies, and buildings accessory to them, may be subject to the disabled access regulations adopted by the Division of the State Architect—Access Compliance.~~

#### **101.11.8.3 [For HCD 2]**

#### **For HCD 2—Department of Housing and Community Development**

~~Application—Permanent buildings and permanent accessory buildings and structures constructed within in mobilehome parks and special occupancy parks, which are permanent facilities under the control and ownership of the park operator.~~

**101.12 [For HCD 1] Local Variances.** ~~The applicable subsection of Health and Safety Code Section 17958.5 is repeated here for clarity and reads as follows:~~

~~**Section 17958.5** Except as provided in Section 17922.6, in adopting the ordinances or regulations pursuant to Section 17958, a city or county may make such changes or modification in the requirements contained in the provisions published in the California Building Standards Code and the other regulations adopted pursuant to Section 17922 as it determines, pursuant to the provisions of Section 17958.7, are reasonably necessary because of local climatic, geological, or topographical conditions.~~

~~For purposes of this subdivision, a city and county may make reasonably necessary modifications to the requirements, adopted pursuant to Section 17922, contained in the provisions of the code and regulations on the basis of local conditions.~~

**101.13 [For HCD 1] Findings, Filings, and Rejection of Modifications.** ~~The applicable subsections of Health and Safety Code Section 17958.7 are repeated here for clarity and read as follows:~~

~~**Section 17958.7 (a)** Except as provided in Section 17922.6, the governing body of a city or county, before making any modifications or changes pursuant to Section 17958.5, shall make an express finding that such modifications or changes are reasonably necessary because of local climatic, geological or topographical conditions. Such a finding shall be available as a public record. A copy of those findings, together with the modification or change expressly marked and identified to which each finding refers, shall be filed with the California Building Standards Commission. No modification or change shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission.~~

~~(b) The California Building Standards Commission may reject a modification or change filed by the governing body of a city or county if no finding was submitted.~~

**~~17958.7. (a) Except as provided in Section 17922.6, the governing~~**

**~~101.14 [For HCD 1 & HCD 2] Ratification by City Council~~** The applicable subsections of Health and Safety Code Section 13869.7 are repeated here for clarity and read as follows:

~~**Section 13869.7 (a).** Any fire protection district organized pursuant to Part 2.7 (commencing with Section 13800) of Division 12 may adopt building standards relating to fire and panic safety that are more stringent than those building standards adopted by the State Fire Marshal and contained in the California Building Standards Code. For these purposes, the district board shall be deemed a legislative body and the district shall be deemed a local agency. Any changes or modifications that are more stringent than the requirements published in the California Building Standards Code relating to fire and panic safety shall be subject to subdivision (b) of Section 18941.5.~~

~~**(b)** Any fire protection district that proposes to adopt an ordinance pursuant to this Section shall, not less than 30 days prior to noticing a proposed ordinance for public hearing, provide a copy of that ordinance, together with the adopted findings made pursuant to subdivision (a), to the city, county, or city and county where the ordinance apply. The city, county, or city and county, may provide the district with written comments, which shall become a part of the fire protection district's public hearing record.~~

~~**(c)** The fire protection district shall transmit the adopted ordinance to the city, county, or city and county where the ordinance will apply. The legislative body of the city, county, or city and county, may ratify, modify, or deny an adopted ordinance and transmit its determination to the district within 15 days of the determination. Any modification or denial of an adopted ordinance shall include a written statement describing the reasons for any modifications or denial. No ordinance adopted by the district shall be effective until ratification by the city, county, or city and county where the ordinance will apply. Upon ratification of an adopted ordinance, the city, county, or city and county, shall file a copy of the findings of the district, and any findings of the city, county, or city and county, together with the adopted ordinance expressly marked and identified to which each finding refers, with the Department of Housing and Community Development.~~

**~~102.2.1.2 [For HCD1] City or County Building Departments.~~** The applicable subsection of Health and Safety Code Section 17960 is repeated here for clarity and reads as follows:

~~— **Section 17960.** The building department of every city or county shall enforce within its jurisdiction all the provisions published in the State Building Standards Code, the provisions of this part, and the other rules and regulations promulgated pursuant to the provisions of this part pertaining to the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses, hotels, or dwellings.~~

**~~102.2.1.2. [For HCD2]~~** Refer to the Mobilehome Parks Act, California Health and Safety Code, Division 13, Part 2.1 (commencing with Section 18200) and California Code of Regulations, Title 25, Division 1, Chapter 2 (commencing with Section 1000) for administrative and enforcement authority, permits, plans, fees, violations, inspections and penalties.

**~~102.2.2.2 [For HCD1] Authority to Enter and Inspect Premises.~~** Health and Safety Code Section 17970 is repeated here for clarity and reads as follows:

~~**Section 17970.** Any officer, employee, or agent of an enforcement agency may enter and inspect any building or premises whenever necessary to secure compliance with, or prevent a violation of, any provision of this part, the building standards published in the State Building Standards Code, and other rules and regulations promulgated pursuant to the provisions of this part which the enforcement agency has the power to enforce.~~

**~~102.2.2.2.1 [For HCD1] Limitations on Authority to Enter.~~** Health and Safety Code Section 17972 is repeated here for clarity and reads as follows:

~~**Section 17972.** No person authorized by this article to enter buildings shall enter any dwelling between the hours of 6 o'clock p.m. of any day and 8 o'clock a.m. of the succeeding day, without the consent of the owner or of the occupants of the dwelling, nor enter any dwelling in the absence of the occupants without a proper written order executed and issued by a court having jurisdiction to issue the order.~~

**102.2.5.2 [For HCD 1] Authority to Condemn.** ~~Administrative actions, enforcement proceedings, nuisance abatements, violation notifications, and penalties shall comply with Health and Safety Code Sections 17910 through 17995.5 and California Code of Regulations, Title 25, Division 1, Chapter 1 (commencing with Section 1).~~

**103.3.1.2 [For HCD 1] Permit Issuance.** ~~Health and Safety Code Section 17960.1 is repeated here for clarity and reads as follows:~~

~~—Section 17960.1 (a) The governing body of a local agency may authorize its enforcement agency to contract with or employ a private entity or persons on a temporary basis to perform the plan-checking function.~~

~~(b) A local agency need not enter into a contract or employ persons if it determines that no entities or persons are available or qualified to perform the plan-checking services.~~

~~(c) Entities or persons employed by a local agency may, pursuant to agreement with the local agency, perform all functions necessary to check the plans and specifications to comply with other requirements imposed pursuant to this part or by local ordinances adopted pursuant to this part, except those functions reserved by this part or local ordinance to the legislative body. A local agency may charge the applicant fees in an amount necessary to defray costs directly attributable to employing or contracting with entities or persons performing services pursuant to this Section which the applicant requested.~~

~~(d) When there is an excessive delay in checking plans and specifications submitted as a part of an application for a residential building permit, the local agency shall, upon request of the applicant, contract with or employ a private entity or persons on a temporary basis to perform the plan-checking function subject to subdivisions (b) and (c).~~

~~(e) For purposes of this Section:~~

~~(1) "Enforcement agency" means the building department or building division of a local agency.~~

~~(2) "Excessive delay" means the enforcement agency of a local agency has taken either of the following:~~

~~(A) More than 30 days after submittal of a complete application to complete the structural building safety plan check of the applicant's set of plans and specifications which are suitable for checking. For a discretionary building permit, the time period specified in this paragraph shall commence after certification of the environmental impact report, adoption of a negative declaration, or a determination by the local agency that the project is exempt from Division 13 (commencing with Section 21000) of the Public Resources Code.~~

~~(B) Including the days actually taken in (A), more than 45 days to complete the checking of the resubmitted corrected plans and specifications suitable for checking after the enforcement agency had returned the plans and specifications to the applicant for correction.~~

~~(3) "Local agency" means a city, county, or city and county.~~

~~(4) "Residential building" means a one-to-four family detached structure not exceeding three stories in height.~~

**103.3.2.2 [For HCD 1] Retention of Plans.**

~~Note: Refer to Building Standards Law, Health and Safety Code Sections 19850 and 19851, for permanent retention of plans. For plan checking of related "Employee Housing," as defined in HSC 17008, refer also to HSC 17021(b) [Effective January 1, 2001].~~

**103.4.8 [For HCD 1] Fees.** ~~Health and Safety Code Section 17951 is repeated here for clarity and reads as follows:~~

~~—Section 17951 (a) The governing body of any county or city, including a charter city, may prescribe fees for permits, certificates, or other forms or documents required or authorized by this part or rules and regulations promulgated pursuant thereto.~~

~~(b) The governing body of any county or city, including a charter city, or fire protection district, may prescribe fees to defray the costs of enforcement required by this part to be carried out by local enforcement agencies.~~

~~(c) The amount of the fees prescribed pursuant to subdivisions (a) and (b) of this Section shall not exceed the amount reasonably required to administer or process these permits, certificates, or other forms or documents, or to defray the costs of enforcement required by this part to be carried out by local enforcement agencies, and shall not be levied for general revenue purposes. The fees shall be imposed pursuant to Section 66016 of the Government Code.~~

**103.5.1.2.2 [For HCD 1 & HCD 2] Scope** ~~All new plumbing work and such portions of existing systems as may be effected by new work, or any changes, shall be inspected by the Administrative Authority to insure compliance with all the requirements of this Code.~~

**103.5.5.1 Defective Systems.** ~~An air test shall [For HCD – “may” replaces the word shall] be used in testing the sanitary condition of the drainage or plumbing system of any building premises when there is reason to believe that it has become defective. In buildings or premises condemned by the proper Authority Having Jurisdiction because of an unsanitary condition of the plumbing system or portion thereof, the alterations of such system shall conform to the requirements of this Code.~~

**103.5.5.2 [For HCD 1 & HCD 2, except as noted below Moved Structures]** ~~All parts of the plumbing systems of any building or part thereof that is moved from one foundation to another, or from one location to another, shall be completely tested as prescribed elsewhere in this Section for new work, except that walls or floors need not be removed during such test [The following language is not adopted by HCD] when other equivalent means of inspection acceptable to the Authority Having Jurisdiction are provided.~~

~~(2001 CPC Section 214)~~ **Listed [Not adopted by HCD]** – Equipment or materials included in a list published by a listing agency that maintains periodic inspection on current production of listed equipment or materials and whose listing states either that the equipment or material complies with approved standards or has been tested and found suitable for use in a specified manner.

~~(2001 CPC Section 221)~~ **Single Family Dwelling – [Not adopted by HCD 1 & 2]** A building, designed to be used, as a home by the owner of such building, which shall be the only dwelling located on a parcel of ground with the usual accessory buildings.

~~(2001 CPC Section 402.3)~~ **402.3 [Not Adopted by HCD] Water Closets.** Water closets, either flush tank, flushometer tank, or flushometer valve operated, shall have an average consumption of not more than 1.6 gallons (6.1 liters) of water per flush.

~~(2001 CPC Section 402.4)~~ **402.4 [Not Adopted by HCD] Urinals.** Urinals shall have an average water consumption of not more than 1.0 gallon (3.8 liters) of water per flush.

**Exception:** If approved by the Administrative Authority, blowout urinals may be installed for public use in stadiums, race courses, fairgrounds, and other structures used for outdoor assembly and for similar uses.

~~(2001 CPC Section 402.5)~~ **402.5 [Not Adopted by HCD] Non-Metered Faucets.** Lavatory faucets shall be designed and manufactured so that they will not exceed a water flow rate of 2.2 gallons (8.4 liters) per minute.

~~(2001 CPC Section 402.6)~~ **402.6 [Not Adopted by HCD] Metered Faucets.** Self-closing or self-closing metering faucets shall be installed on lavatories intended to serve the transient public, such as those in, but not limited to, service stations, train stations, airports, restaurants and convention halls. Metered faucets shall deliver not more than 0.25 gallons (1.0 liter) of water per use.

~~(2001 CPC Section 402.7)~~ **402.7 [Not Adopted by HCD] Kitchen Faucets.** Faucets for kitchen sinks shall be designed and manufactured so that they will not exceed a water flow rate of 2.2 gallons (8.4 liters) per minute.

~~(2001 CPC Section 402.8)~~ **402.8 [Not Adopted by HCD] Shower Heads.** Shower heads shall be designed and manufactured so that they will not exceed a water supply flow rate of 2.5 gallons (9.5 liters) per minute.

**Exception:** Emergency safety showers.

~~(2001 CPC Section 402.9)~~ **402.9 [Not Adopted by HCD] Installation.** Water-conserving fixtures shall be installed in strict accordance with the manufacturers' instructions to maintain their rated performance.

~~(2001 CPC Section 412.7)~~ **412.7** All shower compartments, regardless of shape, shall have a minimum finished interior of one thousand twenty-four (1024) square inches (0.66 m<sup>2</sup>) and shall also be capable of encompassing a thirty (30) inch (750 mm) circle. The minimum required area and dimensions shall be measured at a height equal to the top of the threshold and at a point tangent to its centerline. The minimum area and dimensions shall be maintained to a point seventy (70) inches (1778 mm) above the shower drain outlet with no protrusions other than the fixture valve or valves, shower head, soap dishes, shelves and safety grab bars or rails. Fold-down seats in accessible shower stalls shall be permitted to protrude into the thirty (30) inch (750 mm) circle.

**Exception 1:** ~~[Not adopted by HCD.]~~ Showers which are designed to comply with the accessibility standards listed in Table 14-1.

**Exception 2:** ~~[For HCD 1, HCD 2 & HCD 1A/C] Showers required to be accessible to persons with disabilities shall comply with HCD "Exceptions 1 and 2" listed in Section 412.6 of this code.~~

(2001 CPC Section 413.3) **413.3 ~~[Not Adopted by HCD]~~ Separate Facilities.** Separate toilet facilities shall be provided for each sex.

**Exceptions:**

1. Residential installations.
2. In occupancies serving ten (10) or fewer people, one (1) toilet facility, designed for use by no more than one (1) person at a time, shall be permitted for use by both sexes.
3. In business and mercantile occupancies with a total floor area of fifteen hundred (1500) square feet (139.5 m<sup>2</sup>) or less, one (1) toilet facility, designed for use by no more than one (1) person at a time, shall satisfy the requirements for serving customers and employees of both sexes.

(2001 CPC Section 413.5) **413.5 ~~[Not Adopted by HCD]~~ Facilities in Mercantile and Business Occupancies Serving Customers.**

(2001 CPC Section 413.5.1) **413.5.1 ~~[Not Adopted by HCD]~~** Requirements for customers and employees shall be permitted to be met with a single set of restrooms accessible to both groups. The required number of fixtures shall be the greater of the required number for employees or the required number for customers.

(2001 CPC Section 413.5.2) **413.5.2 ~~[Not Adopted by HCD]~~** Fixtures for customer use shall be permitted to be met by providing a centrally located facility accessible to several stores. The maximum distance from entry to any store to this facility shall not exceed five hundred (500) feet (152.4 m).

(2001 CPC Section 413.5.3) **413.5.3 ~~[Not Adopted by HCD]~~** In stores with a floor area of one hundred fifty (150) square feet (13.9 m<sup>2</sup>) or less, the requirement to provide facilities for employees shall be permitted to be met by providing a centrally located facility accessible to several stores. The maximum distance from entry to any store to this facility shall not exceed three hundred (300) feet (91.4 m).

(2001 CPC Section 413.6) **413.6 ~~[Not Adopted by HCD]~~ Food Service Establishments.** Food service establishments with an occupant load of one hundred (100) or more shall be provided with separate facilities for employees and customers. Customer and employee facilities may be combined for occupant loads less than one hundred (100).

(2001 CPC Section 413.7) **413.7 ~~[Not Adopted by HCD]~~ Toilet Facilities for Workers.** Suitable toilet facilities shall be provided and maintained in a sanitary condition for the use of workers during construction.

(2001 CPC Section 603.4.18) **603.4.18 ~~[Not adopted by HCD]~~ Protection from Fire Systems.**

(2001 CPC Section 603.4.18.1) **603.4.18.1 ~~[Not adopted by HCD]~~** Except as provided under Sections 603.4.18.2 and 603.4.18.3, potable water supplies to fire protection systems that are normally under pressure, including but not limited to standpipes and automatic sprinkler systems, except in one or two family residential sprinkler systems piped in materials approved for potable water distribution systems, shall be protected from back-pressure and back-siphonage by one of the following testable devices:

- (1) Double check valve assembly
- (2) Double check detector assembly
- (3) Reduced pressure backflow preventor
- (4) Reduced pressure detector assembly



Potable water supplies to fire protection systems that are not normally under pressure shall be protected from backflow and shall meet the requirements of the appropriate standard(s) referenced in Table 14-1.

(2001 CPC Section 603.4.18.2) **603.4.18.2** ~~[Not adopted by HCD]~~ Where fire protection systems supplied from a potable water system include a fire department (siamese) connection which is located less than seventeen hundred (1700) feet (518.2 m) from a non-potable water source that could be used by the fire department as a secondary water supply, the potable water supply shall be protected by one of the following:

- (1) Reduced pressure backflow preventor
- (2) Reduced pressure detector assembly

**Note:** Non-potable water sources include fire department vehicles carrying water of questionable quality or water that is treated with antifreeze, corrosion inhibitors, or extinguishing agents

(2001 CPC Section 603.4.18.3) **603.4.18.3** ~~[Not adopted by HCD]~~ Where antifreeze, corrosion inhibitors, or other chemicals are added to a fire protection system supplied from a potable water supply, the potable water system shall be protected by one of the following:

- (1) Reduced pressure backflow preventor
- (2) Reduced pressure detector assembly

(2001 CPC Section 603.4.18.4) **603.4.18.4** ~~[Not adopted by HCD]~~ Whenever a backflow device is installed in the potable water supply to a fire protection system, the hydraulic design of the system shall account for the pressure drop through the backflow device. If such devices are retrofitted for an existing fire protection system, the hydraulics of the sprinkler system design shall be checked to verify that there will be sufficient water pressure available for satisfactory operation of the fire sprinklers.

(2001 CPC Section 603.4.18.5) **603.4.18.5** ~~[Not adopted by HCD]~~ **Residential Sprinkler Systems.** When residential sprinkler systems are installed using the potable water system they shall be installed in accordance with the standards listed in Table 14-1.

(2001 CPC Section 604.1) **604.1** ~~[Not adopted by HCD]~~ Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Asbestos-cement, CPVC, PE, PVC or PEX water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC, PEX water pipe, tubing, and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.

Materials for building water piping and building supply piping shall be in accordance with Table 6-4 and the standards in Table 14-1.

#### **AMENDMENTS:**

#### **CHAPTER 1 ADMINISTRATION**

**NOTE:** This chapter is moved in its entirety to Appendix Chapter 1.

#### **CALIFORNIA) CHAPTER 1**

#### **GENERAL CODE PROVISIONS**

(Note: Adopt only those sections listed in the matrix adoption table.)

#### **SECTION 101 GENERAL**

**101.1 Title.** These regulations shall be known as the California Plumbing Code, may be cited as such and will be referred to herein as "this code." The California Plumbing Code is Part 5 of twelve parts of the official compilation and publication of the adoptions, amendment, and repeal of Plumbing regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2006 Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.

**101.2 Purpose.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; to preserve life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

**101.3 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

**101.3.1 Non-State-Regulated Buildings, Structures, and Applications.** The provisions in Chapters 2 through 16 of the 2006 Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials contained or referenced in this code shall apply to all occupancies and applications not regulated by a state agency.

**101.3.2 State-Regulated Buildings, Structures, and Applications.** The model code provisions, amendments to the model code provisions and/or provisions where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 102 through 113. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.

**Note:** See Legend to distinguish the model code provisions from the California provisions.

1. State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 102 for additional scope provisions.
2. Local detention facilities regulated by the Board of Corrections. See Section 103 for additional scope provisions.
3. Barbering, cosmetology or electrolysis, establishments, acupuncture offices, pharmacies, veterinary facilities, and structural pest control locations regulated by the Department of Consumer Affairs. See Section 104 for additional scope provisions.
4. Energy efficiency standards regulated by the California Energy Commission. See Section 105 for additional scope provisions.
5. Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See Section 106 for additional scope provisions.
6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Health Services. See Section 107 for additional scope provisions.
7. Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with common toilets or cooking facilities. See Section 108 for additional scope provisions.
8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of a covered multifamily

dwelling, and common-use spaces serving covered multifamily dwellings which are regulated by Department of Housing and Community Development. See Section 108 for additional scope provisions.

9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 108 for additional scope provisions.
10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 109.1 for additional scope provisions.
11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 109.2 for additional scope provisions.
12. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 109.3 for additional scope provisions.
13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Health Services, and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 110 for additional scope provisions.
14. Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 111:

1. Buildings or structures used or intended for use as an:

1.1. Asylum, jail

1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity

1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education

1.4. Small family day care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities

1.5. State institutions or other state-owned or state-occupied buildings

1.6. High rise structures

1.7. Motion picture production studios

1.8. Organized camps

1.9. Residential structures

2. Tents, awnings or other fabric enclosures used in connection with any occupancy

3. Fire alarm devices, equipment and systems in connection with any occupancy

4. Hazardous materials, flammable and combustible liquids

5. Public school automatic fire detection, alarm, and sprinkler systems

6. Wildland urban interface fire areas

15. Public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian. See Section 112 for additional scope provisions.
16. Graywater systems regulated by the Department of Water Resources. See Section 113 for additional scope provisions.

**101.4 Appendices.** Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 101.8 of this code.

**101.5 Referenced Codes.** The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Prevention Association are permitted to be used as authoritative guides in determining recognized fire-prevention engineering practices.

**101.6** (Relocated from 2001 CBC 101.8) **Non-Building Standards, Orders and Regulations.** Requirements contained in the Uniform Plumbing Code, or in any other referenced standard, code or document, which are not building standards as defined in Section 18909, Health and Safety Code, shall not be construed as part of the provisions of this code. For non-building standards, orders, and regulations, see other titles of the California Code of Regulations.

**101.7 Order of Precedence and Use.**

**101.7.1 Differences.** In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

**101.7.2 Specific provision.** Where a specific provision varies from a general provision, the specific provisions shall apply.

**101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirement shall prevail.

**101.8 City, County, or City and County Amendments, Additions or Deletions.**

The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 101.8.1. The effective date of amendments, additions, or deletions to this code of cities, counties, or city and counties filed pursuant to Section 101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

**101.8.1 Findings and Filings.**

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

**Exception:** Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3<sup>rd</sup> Street, Room 260, Sacramento, CA 95814.

**101.9 Effective Date of this Code.** Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and

specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

**101.10 Availability of Codes.** At least one entire copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. See Health and Safety Code Section 18942 (d)(1) & (2).

**101.11 Format.** This part fundamentally adopts the Uniform Plumbing Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix adoption table of each chapter of this part. When the Matrix adoption tables make no reference to a specific chapter of the Uniform Plumbing Code, such chapter of the Uniform Plumbing Code is not adopted as a portion of this code.

**101.12 Validity.** If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

## **SECTION 108** **DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)**

**108.1 Purpose.** The purpose of this code is to establish minimum standards to protect, the health, safety, and general welfare of the occupant and the public by governing the erection, construction, reconstruction, enlargement, conversion, alteration, repair, moving, removal, demolition, sanitation, ventilation and maintenance or use of plumbing equipment or systems.

### **SECTION 108.2** **AUTHORITY AND ABBREVIATIONS**

**108.2.1 General.** The Department of Housing and Community Development is authorized by law to promulgate and adopt building standards and regulations for several types of building applications. These applications are grouped and identified by abbreviation in the Matrix Adoption Tables to show which model code sections and amendments are applicable to each application. The applications under the authority of the Department of Housing and Community Development are listed in Sections 108.2.1.1 through 108.2.1.3.

**108.2.1.1 Housing Construction.** Application - Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities, and uses thereto. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation "HCD 1".

Enforcing Agency—Local building department or the Department of Housing and Community Development.

Authority Cited: Health and Safety Code Sections 17921, 17922, 19990 through 19992, and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997, and Government Code Section 12955.1.

**108.2.1.2 Housing Accessibility.** Application- Covered multifamily dwelling units as defined in Chapter 11A of the California Code of Regulations, Title 24, Part 2, also known as the California Building Code (CBC) including but not limited to lodging houses, dormitories, time-shares, condominiums, shelters for homeless persons, congregate residences, apartment houses, dwellings, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities.

Sections of this code identified in the Matrix Adoption Table by the abbreviation "HCD 1/AC" require specific accommodations for persons with physical disabilities, as defined in Chapter 11A of the CBC. The application of such provisions shall be in conjunction with other requirements of this code and apply only to Group R Occupancies which are newly-constructed covered multifamily dwellings as defined in Chapter 11A of the CBC. "HCD 1/AC" applications include, but are not limited to, the following:

1. All newly-constructed covered multifamily dwellings as defined in Chapter 11A of the CBC.
2. New common use areas as defined in Chapter 11A of the CBC serving existing covered multifamily dwellings.

3. Additions to existing buildings, where the addition alone meets the definition of a covered multifamily dwelling as defined in Chapter 11A of the CBC.

4. Common-use areas serving covered multifamily dwellings.

HCD 1A/C building standards generally do not apply to public use areas or public accommodations such as hotels and motels. Public use areas, public accommodations, and housing which is publicly funded as defined in Chapter 2, Chapter 11A, and Chapter 11B of the CBC, are subject to the Division of the State Architect (DSA/AC) and are referenced in Section 109.1.

Enforcing Agency—Local building department or the Department of Housing and Community Development.

Authority Cited: Health and Safety Code Sections 17921, 17922, 19990 through 19992, and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997, and Government Code Section 12955.1.

**108.2.1.3 Permanent Buildings in Mobilehome Parks and Special Occupancy Parks.** Application - Permanent buildings, and permanent accessory buildings or structures, constructed within mobilehome parks and special occupancy parks that are under the control and ownership of the park operator. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation "HCD 2".

Enforcing Agency— Local building department or other local agency responsible for the enforcement of Health and Safety Code Division 13, Part 2.1 and Part 2.3, commencing with Sections 18200 and 18860 respectively, or the Department of Housing and Community Development.

Authority Cited: Health and Safety Code Sections 17921, 17922, 18300 and 18865.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997, and Government Code Section 12955.1.

### **SECTION 108.3** **LOCAL ENFORCING AGENCY**

**108.3.1 Duties and Powers.** The building department of every city, county or city and county shall enforce all the provisions of law, this code, and the other rules and regulations promulgated by the Department of Housing and Community Development pertaining to the installation, erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

The provisions regulating the erection and construction of dwellings and appurtenant structures shall not apply to existing structures as to which construction is commenced or approved prior to the effective date of these regulations. Requirements relating to use, maintenance and occupancy shall apply to all dwellings and appurtenant structures approved for construction or constructed before or after the effective date of this code.

For additional information regarding the use and occupancy of existing buildings and appurtenant structures, see California Code of Regulations, Title 25, Division 1, Chapter 1, Subsection 1, Article 1, commencing with Section 1.

**108.3.2 Laws, Rules, and Regulations.** Other than the building standards contained in this code, and notwithstanding other provisions of law, the statutory authority and location of the laws, rules, and regulations to be enforced by local enforcing agencies are listed by statute in Sections 108.3.2.1 through 108.3.2.5 below:

**108.3.2.1 State Housing Law.** Refer to the State Housing Law, California Health and Safety Code, Division 13, Part 1.5 commencing with Section 17910, and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, Article 1, commencing with Section 1, for the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

**108.3.2.2 Mobilehome Parks Act.** Refer to the Mobilehome Parks Act, California Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000 for mobilehome park administrative and enforcement authority, permits, plans, fees, violations, inspections and penalties both within and outside mobilehome parks.

**Exception:** Mobilehome parks where the Department of Housing and Community Development is the enforcing agency.

**108.3.2.3 Special Occupancy Parks Act.** Refer to the Special Occupancy Parks Act, California Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, Article 1, commencing with Section 2000 for special occupancy park administrative and enforcement authority, permits, fees, violations, inspections and penalties both within and outside of Special Occupancy Parks.

**Exception:** Special occupancy parks where the Department of Housing and Community Development is the enforcing agency.

**108.3.2.4 Employee Housing Act.** Refer to the Employee Housing Act, California Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, Article 1, commencing with Section 600 for employee housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

**108.3.2.5 Factory-Built Housing.** Refer to the Factory-Built Housing Law, California Health and Safety Code, Division 13, Part 6 commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, Article 1, commencing with Section 3000 for factory-built housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

#### **SECTION 108.4** **PERMITS, FEES, APPLICATIONS AND INSPECTIONS**

**108.4.1 Permits.** A written construction permit shall be obtained from the enforcing agency prior to the erection, construction, reconstruction, installation, relocation, or alteration of any plumbing system.

**Exceptions:**

1. Work exempt from permits as specified in Appendix Chapter 1, Sections 103.1.2.1 and 103.1.2.2 of this code.
2. Changes, alterations, or repairs of a minor nature not affecting structural features, egress, sanitation, safety or accessibility as determined by the enforcing agency.

Exemptions from permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of other provision of law or this code.

**108.4.2 Fees.** Subject to other provisions of law the governing body of any city, county, or city and county may prescribe fees to defray the cost of enforcement of rules and regulations promulgated by the Department of Housing and Community Development. The amount of the fees shall not exceed the amount reasonably necessary to administer or process permits, certificates, forms, or other documents, or to defray the costs of enforcement. For additional information, see State Housing Law, Health and Safety Code, Division 13, Part 1.5, Section 17951 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, Article 3, commencing with Section 6.

**108.4.3 Plan Review and Time Limitations.** Subject to other provisions of law, provisions related to plan checking, prohibition of excessive delays, and contracting with or employment of private parties to perform plan checking are set forth in State Housing Law, Health and Safety Code Section 17960.1, and for employee housing, in Health and Safety Code Section 17021.

**108.4.3.1 Retention of Plans.** The building department of every city, county or city and county shall maintain an official copy, microfilm, or electronic or other type of photographic copy of the plans of every building, during the life of the building, for which the department issued a building permit.

**Exceptions:**

1. Single or multiple dwellings not more than two stories and basement in height.
2. Garages and other structures appurtenant to buildings listed in exception 1.

3. Farm or ranch buildings appurtenant to buildings listed in exception (1).

4. Any one-story building where the span between bearing walls does not exceed 25 feet, except a steel frame or concrete building.

All plans for common interest developments as defined in Section 1351 of the California Civil Code shall be retained. For additional information regarding plan retention and reproduction of plans by an enforcing agency, see Health and Safety Code Sections 19850 through 19852.

**108.4.4 Inspections.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or other regulations of the Department of Housing and Community Development.

## **SECTION 108.5**

### **RIGHT OF ENTRY FOR ENFORCEMENT**

**108.5.1 General.** Subject to other provisions of law, officers and agents of the enforcing agency may enter and inspect public and private properties to secure compliance with the rules and regulations promulgated by the Department of Housing and Community Development. For limitations and additional information regarding enforcement, see the following:

1. For applications subject to State Housing Law as referenced in Section 108.3.2.1 of this code, refer to Health and Safety Code Sections 17970 through 17972 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

2. For applications subject to the Mobilehome Parks Act as referenced in Section 108.3.2.2 of this code, refer to the Health and Safety Code, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2.

3. For applications subject to the Special Occupancy Parks Act as referenced in Section 108.3.2.3 of this code, refer to the Health and Safety Code, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2.

4. For applications subject to the Employee Housing Act as referenced in Section 108.3.2.4 of this code, refer to Health and Safety Code Section 17052 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3.

5. For applications subject to the Factory-Built Housing Act as referenced in Section 108.3.2.5 of this code, refer to Health and Safety Code Sections 19991 through 19992 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1.

## **SECTION 108.6**

### **LOCAL MODIFICATION BY ORDINANCE OR REGULATION**

**108.6.1 General.** Subject to other provisions of law, a city, county or city and county may make changes to the provisions adopted by the Department of Housing and Community Development. If any city, county or city and county does not amend, add, or repeal by local ordinances or regulations the provisions published in this code or other regulations promulgated by the Department of Housing and Community Development, those provisions shall be applicable and shall become effective 180 days after publication by the California Building Standards Commission. Amendments, additions, and deletions to this code adopted by a city, county or city and county pursuant to California Health and Safety Code Sections 17958.7 and 18941.5, together with all applicable portions of this code, shall also become effective 180 days after publication of the California Building Standards Code by the California Building Standards Commission.

**108.6.2 Findings, Filings, and Rejections of Local Modifications.** Prior to making any modifications or establishing more restrictive building standards, the governing body shall make express findings and filings, as required by California Health and Safety Code Section 17958.7 stating their findings and that such modifications are reasonably necessary due to local climatic, geological, or topographical conditions. No modification shall become effective or operative unless the following requirements are met:

1. The express findings shall be made available as a public record.



2. A copy of the modification and express finding, each document marked to cross-reference the other, shall be filed with the California Building Standards Commission for cities, counties, or cities and counties, and with the Department of Housing and Community Development for fire protection districts.

3. The California Building Standards Commission has not rejected the modification or change.

Nothing in this section shall limit the authority of fire protection districts pursuant to California Health and Safety Code Section 13869.7 (a).

## **SECTION 108.7** **ALTERNATE MATERIALS, DESIGNS, TESTS AND METHODS OF CONSTRUCTION**

**108.7.1 General.** The provisions of this code as adopted by the Department of Housing and Community Development are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, design or method of construction not specifically prescribed by this code. Consideration and approval of alternates shall comply with Section 108.7.2 for local building departments and Section 108.7.3 for the Department of Housing and Community Development.

**108.7.2 Local Building Departments.** The building department of any city, county or city and county may approve alternates for use in the erection, construction, reconstruction, movement enlargement, conversion, alteration, repair, removal, demolition or arrangement of apartment houses, hotels, motels, lodging houses, or dwellings, including accessory buildings, facilities, and uses thereto, except for the following:

1. Structures located in mobilehome parks as defined in California Health and Safety Code Section 18214.
2. Structures located in special occupancy parks as defined in California Health and Safety Code Section 18862.43.
3. Factory-built housing as defined in California Health and Safety Code Section 19971.

**108.7.2.1 Approval of Alternates.** The consideration and approval of alternates by a local building department shall comply with the following procedures and limitations:

1. The approval shall be granted on a case-by-case basis.
2. Evidence shall be submitted to substantiate claims that the proposed alternate, in performance, safety, and for the protection of life and health, conforms to, or is at least equivalent to, the standards contained in this code and other rules and regulations promulgated by the Department of Housing and Community Development.
3. The local building department may require tests performed by an approved testing agency at the expense of the owner or owner's agent as proof of compliance.
4. If the proposed alternate is related to accessibility in covered multifamily dwellings or facilities serving covered multifamily dwellings as defined in Chapter 11A of the CBC, the proposed alternate must also meet the threshold set for "EQUIVALENT FACILITATION" as defined in Chapter 11A of the CBC.

For additional information regarding approval of alternates by a local building department pursuant to the State Housing Law, see California Health and Safety Code Section 17951(e) and California Code Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

**108.7.3 Department of Housing and Community Development.** The Department of Housing and Community Development may approve alternates for use in the erection, construction, reconstruction, movement enlargement, conversion, alteration, repair, removal demolition or arrangement of apartment houses, hotels, motels, lodging houses, dwellings, including accessory buildings, facilities, and uses thereto. The consideration and approval of alternates shall comply with the following:

1. The department may require tests at the expense of the owner or owner's agent to substantiate compliance with the California Building Standards Code.
2. The approved alternate shall, for its intended purpose, be at least equivalent in performance and safety to the materials, designs, tests, or methods of construction prescribed by this code.

## **SECTION 108.8** **APPEALS BOARD**

**108.8.1 General.** *Every city, county or city and county, shall establish a local appeals board and a housing appeals board. The local appeals board and housing appeals board shall each be comprised of at least five voting members who shall serve at the pleasure of the city, county or city and county. Appointees shall not be employees of the jurisdiction and shall be qualified and specifically knowledgeable in the California Building Standards Codes and applicable local ordinances.*

**108.8.2 Definitions.** *The following terms shall for the purposes of this section have the meaning shown.*

**Housing Appeals Board.** *The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the requirements of the city, county or city and county relating to the use, maintenance, and change of occupancy of buildings and structures, including requirements governing alteration, additions, repair, demolition, and moving. In any area in which there is no such board or agency, "housing appeals board" means the local appeals board having jurisdiction over the area.*

**Local Appeals Board.** *The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the building requirements of the city, county or city and county. In any area in which there is no such board or agency, "local appeals board" means the governing body of the city, county or city and county having jurisdiction over the area.*

**108.8.3 Appeals.** *Except as otherwise provided by law, any person, firm, or corporation adversely affected by a decision, order, or determination by a city, county or city and county relating to the application of building standards published in the California Building Standards Code, or any other applicable rule or regulation adopted by the Department of Housing and Community Development, or any lawfully enacted ordinance by a city, county or city and county, may appeal the issue for resolution to the local appeals board or housing appeals board as appropriate.*

*The local appeals board shall hear appeals relating to new building construction and the housing appeals board shall hear appeals relating to existing buildings.*

## **SECTION 108.9** **UNSAFE BUILDINGS OR STRUCTURES**

**108.9.1 Authority to Enforce.** *Subject to other provisions of law, the administration, enforcement, actions, proceedings, abatement, violations and penalties for unsafe buildings and structures are contained in the following statutes and regulations:*

- 1. For applications subject to State Housing Law as referenced in Section 108.3.2.1 of this code, refer to Health and Safety Code Sections 17910 through 17995.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.*
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 108.3.2.2 of this code, refer to the Health and Safety Code, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2.*
- 3. For applications subject to the Special Occupancy Parks Act as referenced in Section 108.3.2.3 of this code, refer to the Health and Safety Code, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2.*
- 4. For applications subject to the Employee Housing Act as referenced in Section 108.3.2.4 of this code, refer to Health and Safety Code Sections 17000 through 17062.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3.*
- 5. For applications subject to the Factory-Built Housing Act as referenced in Section 108.3.2.5 of this code, refer to Health and Safety Code Sections 19960 through 19997 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1.*

**108.9.2 Actions and Proceedings.** *Subject to other provisions of law, punishments, penalties and fines for violations of building standards are contained in the following statutes and regulations:*

1. For applications subject to State Housing Law as referenced in Section 108.3.2.1 of this code, refer to Health and Safety Code Sections 17980 through 17995.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

2. For applications subject to the Mobilehome Parks Act as referenced in Section 108.3.2.2 of this code, refer to Health and Safety Code Sections 18200 through 18700 and California Code of Regulations, Title 25, Division 1, Chapter 2.

3. For applications subject to the Special Occupancy Parks Act as referenced in Section 108.3.2.3 of this code, refer to Health and Safety Code Sections 18866 through 18869 and California Code of Regulations, Title 25, Division 1, Chapter 2.2.

4. For applications subject to the Employee Housing Act as referenced in Section 108.3.2.3 of this code, refer to Health and Safety Code Sections 17060 through 17062.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3.

5. For applications subject to the Factory-Built Housing Act as referenced in Section 108.3.2.4 of this code, refer to Health and Safety Code Sections 19995 through 19997 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1.

## **SECTION 108.10** **OTHER BUILDING REGULATIONS**

**108.10.1 Existing Structures.** Notwithstanding other provisions of law, the replacement, retention, and extension of original materials and the use of original methods of construction for any existing building or accessory structure, or portions thereof, shall be permitted. For additional information, see California Health and Safety Code Sections 17912 and 17958.8.

**108.10.2 Moved Structures.** Subject to the requirements of California Health and Safety Code Sections 17922.3 and 17958.9, local ordinances or regulations relating to a moved residential or accessory structure shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the structure does not become or continue to be a substandard building.

### **NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18620, 18630, 18640, 18670, 18690, 18691, 18873 through 18873.5, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 2** **DEFINITIONS**

Adopt entire Chapter 2 as amended.

### **203.0**

**Approved – ~~[Not adopted by HCD, See “Testing Agency”]~~ ...**

**~~Approved [For HCD 1 & HCD 2]~~ Acceptable to the Department.**

**~~Note:~~** ~~This definition in Health and Safety Code Section 17920(a) is repeated here for clarity for the Department of Housing and Community Development and reads as follows:~~

**~~Exception:~~** ~~“Approved” also means meeting the approval of the enforcement agency, except as otherwise provided by statute, when used in connection with any system, material, type of construction, fixture, or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities, technical, health, or scientific organizations or agencies.~~

**~~Notes:~~** ~~1. See Health and Safety Code Section 17921.3 for “approved” as applied to low flush water closets in residential construction, as referenced in Section 101.11 of this code.~~

~~2. See Health and Safety Code Section 19966 for "approved" as applied to Factory-Built Housing as referenced in Section 101.11 of this code.~~

**Approved** – Acceptable to the Authority Having Jurisdiction.

~~**Exception:** [HCD 1 & HCD 2] For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "Approved" means meeting the approval of the Enforcing Agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities, or technical, health, or scientific organizations or agencies.~~

**Notes:**

1. See Health and Safety Code Section 17920 for "Approved" as applied to residential construction and buildings or structures accessory thereto as referenced in Section 108.2.

2. See Health and Safety Code Section 17921.1 for "Approved" as applied to the use of hotplates in residential construction referenced in Section 108.2.

3. See Health and Safety Code Section 17921.3 for "Approved" as applied to low-flush water closets in residential construction, as referenced in Section 108.2.

4. See Health and Safety Code Section 19966 for "Approved" as applied to Factory-Built Housing as referenced in Section 108.3.2.5.

5. See Health and Safety Code Section 18201 for "Approved" as applied to Mobilehome Parks as referenced in Section 108.2.

6. See Health and Safety Code Section 18862.1 for "Approved" as applied to Special Occupancy Parks as referenced in Section 108.2.

**Approved Testing Agency** – ~~[Not adopted by HCD, See "Testing Agency"]~~ An organization primarily established for purposes of testing to approved standards and approved by the Authority Having Jurisdiction.

~~[HCD 1 & HCD 2] For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "Approved Testing Agency" is any agency which is determined by the enforcing agency, except as otherwise provided by statute, to have adequate personnel and expertise to carry out the testing of systems, materials, and construction fixtures or appliances.~~

**Authority Having Jurisdiction** – The organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installations, or procedures. The authority having jurisdiction shall be a federal, state, local or other regional department or an individual such as a plumbing official; mechanical official; labor department official; health department official; building official or others having statutory authority. In the absence of a statutory authority, the authority having jurisdiction may be some other responsible party. This definition shall include the authority having jurisdiction's duly authorized representative.

~~[HCD 1 & HCD 2] For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "Authority Having Jurisdiction" shall mean "Enforcing Agency" as defined in Section 207.0 of this code.~~

**204.0**

~~**Building** [For HCD 1 & HCD 2] Building means a structure subject to this part.~~

~~**Note:** This definition in Health and Safety Code Section 17920(b) is repeated here for clarity for the Department of Housing and Community Development.~~

**Building** – A structure built, erected, and framed of component structural parts designed for the housing, shelter, enclosure, or support of persons, animals, or property of any kind.

~~**Exceptions:** [HCD 1 & HCD 2] For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "BUILDING" shall not include the following:~~

1. Any mobilehome as defined in Health and Safety Code Section 18008.

2. Any manufactured home as defined in Health and Safety Code Section 18007.

3. Any commercial modular as defined in Health and Safety Code Section 18001.8 or any special purpose commercial modular as defined in Section 18012.5.

4. Any recreational vehicle as defined in Section Health and Safety Code 18010.

5. Any multi-unit manufactured housing as defined in Section Health and Safety Code 18008.7.

For additional information, see Health and Safety Code Section 18908.

#### **205.0**

**Covered Multifamily Dwelling** ~~[For HCD 1/AC]~~ See Section 101.11.8.2 (under "HCD 1/AC") of this code See Section 108.2.1.2.

#### **206.0**

**Department** – ~~[For HCD 1, HCD 2 & HCD 1/AC & HCD 2]~~ Department means the Department of Housing and Community Development ~~[HCD 1, HCD 1/AC & HCD 2]~~ For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "Department" means the Department of Housing and Community Development.

**Note:** This definition in Health and Safety Code Section 17920(d) is repeated here for clarity for the Department of Housing and Community Development.

**Department Having Jurisdiction** – ~~[Not adopted by HCD]~~ The Authority Having Jurisdiction, including any other law enforcement agency affected by any provision of this code, whether such agency is specifically named or not.

~~[HCD 1 & HCD 2]~~ For applications listed in Section 108.2 regulated by the Department of Housing and Community Development, "Department Having Jurisdiction" shall mean "Enforcing Agency" as defined in Section 207.0 of this code.

#### **207.0**

**Enforcing Agency** – ~~[For HCD 1, HCD 1/AC & HCD 2]~~ the designated department or agency as specified in statutes and regulations to enforce the specific building standards promulgated or adopted by the specified state agency. ~~For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development, "Enforcing Agency" is~~ The the designated department or agency as specified by statute or regulation.

**Enforcement Agency** – ~~[For HCD 1, HCD 2 & HCD 1/AC & HCD 2]~~ See Enforcing Agency.

#### **210.0**

~~HCD 1~~ – See Section 101.11.8.1 of this code for a detailed description of this term.

~~HCD 1/AC~~ – See Section 101.11.8.2 of this code for a detailed description of this term.

~~HCD 2~~ – See Section 101.11.8.3 of this code for a detailed description of this term.

#### **214.0**

**Labeled** – ~~[For HCD 1 & HCD 2]~~ Labeled means equipment or materials to which has been attached a label, symbol or other identifying mark of an organization, approved by the department, that maintains a periodic inspection program of production of labeled products, installations, equipment, or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**Note:** This definition in Health and Safety Code Section 17920(g) is repeated here for clarity for the Department of Housing and Community Development.

**Labeled** – ~~[Not adopted by HCD]~~ Equipment or materials bearing a label of a listing agency (accredited conformity assessment body). See Listed (third-party certified).

~~[HCD 1 & HCD 2]~~ For applications listed in Section 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, "Labeled" means equipment or materials to which has been attached a label, symbol or other identifying mark of an organization, approved by the Department, that maintains a periodic inspection

program of production of labeled products, installations, equipment, or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**Lavatory** – ~~[For HCD 1 & HCD 2] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development.~~ “Lavatory” shall mean A a plumbing fixture used for washing the hands, arms, face and head.

**Limited-density Owner-built Dwelling** – ~~[For HCD 1] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development.~~ “Limited-density Owner-built Dwelling” shall mean ~~Any~~ any structure consisting of one or more habitable rooms intended or designed to be occupied by one family with facilities for living or sleeping, with use restricted to rural areas designated by local jurisdiction in compliance with the requirements of Health and Safety Code Section 17958.2.

**Listed** – ~~[For HCD 1 & HCD 2] Listed means all products that appear in a list published by an approved testing or listing agency.~~

**Note:** ~~This definition in Health and Safety Code Section 17920(h) is repeated here for clarity for the Department of Housing and Community Development.~~

**Listed (Third-party certified)** – Equipment or materials included in a list published by a listing agency (accredited third party assessment body) that maintains periodic inspection on current production of listed equipment or materials and whose listing states either that the equipment or material complies with approved standards or has been tested and found suitable for use in a specified manner.

~~[HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development.~~ “Listed” means all products that appear in a list published by an approved testing or listing agency. For additional information, see Health and Safety Code Section 17920(h).

**Listing Agency** ~~[For HCD 1 & HCD 2] Listing agency means an agency approved by the department that is in the business of listing and labeling products, materials, equipment, and installations tested by an approved testing agency, and that maintains a periodic inspection program on current production of listed products, equipment, and installations, and that, at least annually, makes available a published report of these listings.~~

**Note:** ~~This Health and Safety Code definition Section 17920(i) is repeated here for clarity for the Department of Housing and Community Development.~~

**Listing Agency** – ~~[Not adopted by HCD]~~ An agency accredited by an independent and authoritative conformity assessment body to operate a material and product listing and labeling (certification) system and which is accepted by the Authority Having Jurisdiction which is in the business of listing or labeling. The system includes initial and ongoing product testing, a periodic inspection on current production of listed (certified) products, and which makes available a published report of such listing in which specific information is included that the material or product conforms to applicable standards and found safe for use in a specific manner.

~~[HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development.~~ “Listing Agency” means an agency approved by the department that is in the business of listing and labeling products, materials, equipment, and installations tested by an approved testing agency, and that maintains a periodic inspection program on current production of listed products, equipment, and installations, and that, at least annually, makes available a published report of these listings. For additional information, see Health and Safety Code Section 17920(i).

**Low VOC Cement:** ~~[HCD 1 & HCD 2] Cement with a volatile organic compound (VOC) content of less than or equal to 490 g/L for CPVC Cement, 510 g/L for PVC Cement, and 325 g/L for ABS Cement, as determined by the South Coast Air Quality Management District’s Laboratory Methods of Analysis for Enforcement Samples, Method 316A..~~

**Low VOC One-Step Cement:** Listed solvent cements that do not require the use of primer with a volatile organic compound (VOC) content of less than or equal to 490 g/L for CPVC Cement, 510 g/L for PVC Cement, and 325 g/L for ABS Cement, as determined by the South Coast Air Quality Management District’s Laboratory Methods of Analysis for Enforcement Samples, Method 316A.

**Low VOC Primer:** ~~[HCD 1 & HCD 2] Primer with a volatile organic compound (VOC) content of less than or equal to 550 g/L, as determined by the South Coast Air Quality Management District’s Laboratory Methods of Analysis for Enforcement Samples, Method 316A.~~

## 216.0

**Nuisance** – ~~[For HCD 1 & HCD 2] Nuisance means any nuisance defined pursuant to Part 3 (commencing with Section 3479) of Division 4 of the Civil Code, or any other form of nuisance recognized at common law or in equity.~~

**Note:** ~~This definition in Health and Safety Code Section 17920(l) 17920(k) is repeated here for clarity for the Department of Housing and Community Development.~~

**Nuisance** – ~~[Not adopted by HCD]~~ Includes, but is not limited to:

- (1) Any public nuisance known at common law or in equity jurisprudence.
- (2) Whenever any work regulated by this code is dangerous to human life or is detrimental to health and property.
- (3) Inadequate or unsafe water supply or sewage disposal system.

**[HCD 1 & HCD 2]** For applications listed in Sections 108.2.1.1 regulated by the Department of Housing and Community Development, “Nuisance” shall mean any nuisance as defined in Health and Safety Code Section 17920(k).

### **Notes:**

1. For applications subject to the Mobilehome Parks Act as referenced in Section 108.3.2.2 of this code, refer to California Code of Regulations, Title 25 Division 1, Chapter 2 for the definition of “Nuisance”.
2. For applications subject to the Special Occupancy Parks Act as referenced in Section 108.3.2.3 of this code, refer to California Code of Regulations, Title 25, Division 1, Chapter 2.2 for the definition of “Nuisance”.

## 222.0

**Testing Agency** – ~~[For HCD 1 & HCD 2] Testing agency means an agency approved by the department as qualified and equipped for testing of products, materials, equipment, and installations in accordance with nationally recognized standards For applications listed in Sections 108.2.1.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, s See “Approved Testing Agency”.~~

**Note:** ~~This definition in Health and Safety Code Section 17920(m) is repeated here for clarity for the Department of Housing and Community Development.~~

## 223.0

**UPC** – ~~[For HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development, “UPC” is the The latest edition of the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials.~~

## 225.0

**Water Closet** – ~~[For HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development, “Water Closet” is A-a plumbing fixture (which may be used for both solids and liquids) in which the waste matter is removed by flushing with water.~~

### **NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 3 GENERAL REGULATIONS**

Adopt entire Chapter 3 as amended.

**301.2 Alternate Materials and Methods of Construction Equivalency.** Nothing in this code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this code. Technical documentation shall be submitted to the Authority Having Jurisdiction to demonstrate equivalency. The Authority Having Jurisdiction shall approve the system, method,



or device when determined to be equivalent or superior. **[HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 and 108.2.1.3 regulated by the Department of Housing and Community Development, s See Section 108.7**

However, the exercise of this discretionary approval by the Authority Having Jurisdiction shall have no effect beyond the jurisdictional boundaries of said Authority Having Jurisdiction. Any alternate material or method of construction so approved shall not be considered as conforming to the requirements and/or intent of this code for any purpose other than that granted by the Authority Having Jurisdiction when the submitted data does not prove equivalency.

**301.2.5 [For HCD 1] Alternate Materials and Methods.** *The applicable subsections of Health and Safety Code Section 17951 are repeated here for clarity and read as follows:*

**Section 17951(d) (2)** *The building department of any city or county may approve an alternate if it finds that the proposed design is satisfactory and that the material, appliance, installation, device, arrangement, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in the California Building Standards Code or this part in performance, safety, and for the protection of life and health.*

**(3)** *The building department of any city or county shall require evidence that any material, appliance, installation, device, arrangement, or method of construction conforms to, or that the proposed alternate is at least equivalent to, the requirements of this part, building standards published in the California Building Standards Code, or the other rules and regulations promulgated pursuant to this part and in order to substantiate claims for alternates, the building department of any city or county may require tests as proof of compliance to be made at the expense of the owner or the owner's agent by an approved testing agency selected by the owner or the owner's agent.*

**301.2.6 [For HCD 2] Alternate Materials and Methods.** *The applicable subsections of Health and Safety Code Sections 18305 are repeated here for clarity and read as follows:*

**Section 18305(a)** *This part is not intended to prevent the use of any material, appliance, installation, device, arrangement, or method of construction not specifically prescribed by this part and the rules and regulations adopted pursuant to this part, if the alternate used has been approved.*

**(b)** *The department may approve any alternate if it finds that the proposed design is satisfactory and that the material, appliance, installation, device, arrangement, method, or work offered is, for the purpose intended, at least the equivalent to that prescribed in this part and the rules and regulations adopted pursuant to this part in quality, strength, effectiveness, fire resistance, durability, safety, and for the protection of life and health.*

**(c)** *Whenever there is evidence that any material, appliance, installation, device, arrangement, or method of construction does not conform to the requirements of this part and the rules and regulations promulgated pursuant to this part, or in order to substantiate claims for alternates, the department may require proof of compliance to be made at the expense of the owner or his or her agent.*

**(d)** *The department shall notify the appropriate enforcement agency and plan checking agency of its findings.*

**(e)** *This Section is not applicable to local regulations authorized by this part.*

**301.3 301.5 [For HCD 1 & HCD 2] One- and Two-Family Dwellings.** **[HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, t The P** *provisions contained in this code shall not apply to one and two-family dwelling private sewage disposal systems and minimum plumbing facilities when alternate facilities or installations have been approved by the local health authority, provided that such alternative facilities or installations provide substantially equivalent or greater protection to health and safety.*

**303.0 Disposal of Liquid Waste.** It shall be unlawful for any person to cause, suffer, or permit the disposal of sewage, human excrement, or other liquid wastes, in any place or manner, except through and by means of an approved drainage system, installed and maintained in accordance with the provisions of this code.

**Exception—[For HCD 1 ]:** *Limited-density owner-built rural dwellings. A water closet shall not be required when an alternate system is provided and has been approved by the local health official. Where an alternative to the water closet is installed, a system for the disposal or treatment of graywater shall be provided to the dwelling. Graywater systems shall be designed according to water availability, use and discharge. The design, use and maintenance standards of such systems shall be the prerogative of the local health official.*



**304.0 Connections to Plumbing System Required.** All plumbing fixtures, drains, appurtenances and appliances, used to receive or discharge liquid wastes or sewage, shall be connected properly to the drainage system of the building or premises, in accordance with the requirements of this code.

**Exception—**~~[For HCD 1]:~~ *Limited-density owner-built rural dwellings. Where conventional plumbing, in all or in part, is installed within the structure, it shall be installed in accordance with the provisions of this code. Alternative materials and methods shall be permitted provided that the design complies with the intent of the code, and that such alternatives shall perform to protect health and safety for the intended purpose.*

**316.1.6 Solvent Cement Plastic Pipe Joints.** Plastic pipe and fittings designed to be joined by solvent cementing shall comply with appropriate IAPMO Installation Standards.

ABS pipe and fittings shall be cleaned and then joined with solvent cement(s).

CPVC pipe and fittings shall be cleaned and then joined with listed primer(s) and solvent cement(s).

**Exceptions:**

1. Listed solvent cements that do not require the use of primer shall be permitted for use with CPVC pipe and fittings, manufactured in accordance with ASTM D2846, 1/2 inch through 2 inches in diameter.
2. ~~[HCD 1 & HCD 2] Low VOC One-Step Cement that does not require the use of primer shall be utilized with CPVC pipe and fittings, manufactured in accordance with ASTM D2846, 1/2 inch through 2 inches in diameter.~~

PVC pipe and fittings shall be cleaned and joined with primer(s) and solvent cement(s). A solvent cement transition joint between ABS and PVC building drain or building sewer shall be made using a listed transition solvent cement.

~~**[HCD 1 & HCD 2]** For applications listed in Sections 108.2.1.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, p~~ Plastic pipe and fittings joined with solvent cement shall utilize Low-VOC primer(s), if a primer is required, and Low-VOC solvent cement(s) as defined in Section 215.

~~**316.1.6.1 [For HCD 1 & HCD 2] Solvent Cement Plastic Pipe Joints.** Plastic pipe and fittings designed to be joined by solvent cementing shall comply with Section 310.4 of this code and an approved nationally recognized installation standard listed in Table 14-1.~~

~~ABS pipe and fittings shall be cleaned and then joined with listed solvent cement(s).~~

~~CPVC and PVC pipe and fittings shall be cleaned and joined with listed primer(s) and solvent cement(s).~~

~~**316.2.4 [For HCD 1 & HCD 2] Dielectric Unions.** [HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, D-d~~ Dielectric unions shall be used at all points of connection where there is a dissimilarity of metals.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## CHAPTER 4 PLUMBING FIXTURES AND FIXTURE FITTINGS

Adopt entire Chapter 4 as amended.

**402.0 Water-Conserving Fixtures and Fittings.**

(2001 CPC Section 402.0) ~~[For HCD 1 & HCD 2] The applicable subsections of Health and Safety Code Section 17921.3 (a), (b), (c), (d), (e), and (g), which are building standards, are is repeated here for clarity and reads as follows:~~

~~**Section 17921.3 (a)** All new buildings constructed in this state shall use water closets and associated flushometer valves, if any, which use no more than an average of 1.6 gallons per flush and which meet performance standards~~

established by American Society of Mechanical Engineers and standards A112.19.2-1990 and A112.19.6-1990, and urinals and associated flushometer valves, if any, which use no more than an average of one gallon per flush and which meet performance standards established by American Society of Mechanical Engineers standards A112.19.2-1990 and A112.19.6-1990.

~~(b) Any city, county, or city and county may enact an ordinance to allow the sale and installation of non-low consumption water closets or urinals upon its determination that the unique configuration of building drainage systems or portions of a public sewer system within the jurisdiction or both, requires a greater quantity of water to flush the system in a manner consistent with public health. At the request of a public agency providing sewer services within the jurisdiction, the city, county, or city and county shall hold a public hearing on the need for an ordinance as provided in this subdivision. Prior to this hearing or to the enactment of the ordinance, those agencies responsible for the provision of water and sewer services within the jurisdiction, if other than the agency considering adoption of the ordinance, shall be given at least 30 days' notice of the meeting at which the ordinance may be considered or adopted.~~

~~(c) On or after January 1, 1994, all water closets sold or installed in this state shall be water closets and associated flushometer valves, if any, which use no more than an average of 1.6 gallons per flush and which meet performance standards established by American Society of Mechanical Engineers standards A112.19.2-1990 and A112.19.6-1990, and urinals and associated flushometer valves, if any, which use no more than an average of one gallon per flush and which meet performance standards established by American Society of Mechanical Engineers standards A112.19.2-1990 and A112.19.6-1990. Blowout water closets and associated flushometer valves are exempt from the flush volume requirements of this section.~~

~~(d) Notwithstanding subdivision (c), on or after January, 1994, water closets and urinals which do not meet the standards referenced in subdivision (c) may be sold or installed for use only under either of the following circumstances:~~

~~(1) Installation of the water closet or urinal to comply with the standards referenced in subdivision (c) would require modifications of plumbing system components located beneath a finished wall or surface.~~

~~(2) The non-low consumption water closets, urinals, and flushometer valves, if any, would be installed in a home or building which has been identified by a local, state, or federal government entity as a historical site, and historically accurate water closets and urinals that comply with the flush volumes specified in subdivision (c) are not available.~~

~~(e) (1) On or after January 1, 1994, all water closets and urinals sold for installation, or installed, shall be labeled, on both fixture and container, in accordance with their consumption classification and the average water consumption, measured in gallons, for that classification. The fixture label shall be intended for removal by the purchaser only, and shall so state on the label.~~

~~(2) The wording on the label shall include, but not necessarily be limited to, the following: "This fixture qualifies according to ASME test procedures as a low consumption water closet/urinal with an average consumption flush of 1.6 gallons or less/1.0 gallon or less."~~

~~(f) (1) This section shall not be construed to preempt any actions of cities, counties, cities and counties, or districts which prescribe additional or more restrictive conservation requirements affecting the sale, installation or use of low consumption water closets, urinals, and flushometer valves that meet the standards referenced in subdivision (c), or affecting the continued use of non-low consumption water closets, urinals, and flushometer valves installed prior to January 1, 1994, that shall result in greater savings of water than would result under this section.~~

~~(2) This section shall not be construed as granting any new or additional powers to cities, counties, cities and counties, or districts to promulgate or establish laws, ordinances, regulations, or rules governing the sale, installation, or use of low consumption water closets, urinals, and flushometer valves.~~

~~(g) As used in this section, "non-low consumption flushometer valve," "non-low consumption urinal," and "non-low consumption water closet" shall refer to devices which do not meet the standards referenced in subdivision (c).~~

**402.1** Flush volumes for low consumption water saver water closets and urinals shall be in accordance with applicable standards referenced in Table 14-1. **[HCD 1 & HCD 2] For applications listed in Sections 108.2.1.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, s See Health and Safety Code Section 17921.3.**

**406.5. Drinking Fountains. 407.4.2 [For HCD 1 & HCD 2] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, D d Drinking fountains shall be installed and so regulated that a jet of water extending at least 2 inches (51 mm) in height from the water orifice shall be constantly available when turned on. The orifice shall not be accessible to the mouth of the drinker nor subject to immersion.**

(2001 CPC Section 408.7) **408.7[Not Adopted by HCD]. Refer to California Code of Regulations, Title 24, Part 2, Chapter 11A, California Building Code.] Installations for the Handicapped** Where facilities for the handicapped are required in applicable building regulations, the facilities shall be installed in accordance with those regulations.

**407.7 Installations for Persons with Disabilities.** Where facilities for the persons with disabilities are required in applicable building regulations, the facilities shall be installed in accordance with those regulations.

**[HCD 1/AC]** *For specific requirements regarding accommodations for persons with physical disabilities, see California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable.*

(2001 CPC Section 411.4) **411.4 [Not Adopted by HCD] 410.4 Water Supply for Flush Tanks.** An adequate quantity of water shall be provided to flush and clean the fixture served. The water supply for flushing tanks and flushometer tanks equipped for manual flushing shall be controlled by a float valve or other automatic device designed to refill the tank after each discharge and to completely shut off the water flow to the tank when the tank is filled to operational capacity. Provision shall be made to automatically supply water to the fixture so as to refill the trap seal after each flushing. The water supply to flush tanks equipped for automatic flushing shall be controlled by a suitable timing device.

(2001 CPC Section 411.5) **411.5 [Not adopted by HCD]** *(This section was removed from the 2006 UPC)* **Flush Valves in Flush Tanks.** Flush valve seats in tanks for flushing water closets shall be at least one (1) inch (25.4 mm) above the flood level rim of the bowl connected thereto, except in approved water closet and flush tank combinations designed so that when the tank is flushed and the fixture is clogged or partially logged, the flush valve closes tightly so that water does not spill continuously over the rim of the bowl or backflow from the bowl to the tank.

(2001 CPC Section 411.6) **411.6 [Not Adopted by HCD] 410.5 Overflows in Flush Tanks.** Flush tanks shall be provided with overflows discharging into the water closet or urinal connected thereto. Overflows supplied as original parts with the fixture shall be of sufficient size to prevent tank flooding at the maximum rate at which the tank is supplied with water under normal operating conditions and when installed per manufacturer's instructions.

(2001 CPC Section 412.6) **411.6** Each shower receptor shall be an approved type and be so constructed as to have a finished dam, curb, or threshold which is at least one (1) inch (25.4 mm) lower than the sides and back of such receptor. In no case shall any dam or threshold be less than two (2) inches (51 mm) or more than nine (9) inches (229 mm) in depth when measured from the top of the dam or threshold to the top of the drain. Each such receptor shall be provided with an integral nailing flange to be located where the receptor meets the vertical surface of the finished interior of the shower compartment. The flange shall be watertight and extend vertically a minimum of one (1) inch (25.4 mm) above the top of the sides of the receptor. The finished floor of the receptor shall slope uniformly from the sides toward the drain not less than one-quarter (1/4) inch per foot (20.9 mm/m), nor more than one-half (1/2) inch per foot (41.8 mm/m). Thresholds shall be of sufficient width to accommodate a minimum twenty-two (22) inch (559 mm) door. Shower doors shall open so as to maintain a minimum twenty-two (22) inch (559 mm) unobstructed opening for egress.

**Exception:** Showers which are designed to comply with the accessibility standards listed in Table 14-1. **[HCD 1/AC]** *Specific requirements regarding accommodations for persons with physical disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable. Table 14-1 does not contain the correct accessibility standards for use in California.*

**Exception 1: [Not adopted by HCD. Refer to Exception 2].** Showers which are designed to comply with the accessibility standards.

**Exception 2: [For HCD 1/AC]** *Showers in covered multi-family dwelling units required to be accessible by persons with disabilities shall be designed in accordance with California Code of Regulations, Title 24, Part 2, Chapter 11A.*

**Exception 3: [For HCD 2]** *Showers in permanent mobilehome park buildings and special occupancy park buildings and structures, which are required to be accessible by persons with disabilities, shall be designed in compliance with the requirements of California Code of Regulations, Title 24, Part 2, Chapter 11B.*

**411.7** All shower compartments, regardless of shape, shall have a minimum finished interior of one thousand twenty-four (1024) square inches (0.66 in<sup>2</sup>) and shall also be capable of encompassing a thirty (30) inch (762 mm) circle. The minimum required area and dimensions shall be measured at a height equal to the top of the threshold and at a point tangent to its centerline. The minimum area and dimensions shall be maintained to a point seventy (70) inches (1778 mm) above the shower drain outlet with no protrusions other than the fixture valve or valves, shower head, soap dishes, shelves and safety grab bars or rails. Fold-down seats in accessible shower stalls shall be permitted to protrude into the thirty (30) inch (0.76 m) circle.

**Exception No. 1:** Showers which are designed to comply with ICC/ANSI A117.1 accessibility standards. **[HCD 1/AC]** *Specific requirements regarding accommodations for persons with physical disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable. ICC/ANSI A117.1 does not contain the correct accessibility standards for use in California.*

**Exception No. 2:** The minimum required area and dimension shall not apply where an existing bathtub is replaced by a shower receptor having minimum overall dimensions of 30 inches (750 mm) in width and 60 inches (1,500 mm) in length.

**Exception No. 3:** [HCD 1/AC] Specific requirements regarding accommodations for persons with physical disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable. ICC/ANSI A117.1 does not contain the correct accessibility standards for use in California.

(2001 CPC Section 414.0) ~~[Not Adopted by HCD]~~ **413.0 Fixtures and Fixture Fittings for Persons with Disabilities.** Plumbing fixtures and fixture fittings for persons with disabilities shall conform to the appropriate standards referenced in Table 4-1 of this code. [HCD 1/AC] Specific requirements regarding accommodations for persons with physical disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable. Table 4-1 does not contain the correct accessibility standards for use in California.

**TABLE 4-1  
MINIMUM PLUMBING FACILITIES**

Each building shall be provided with sanitary facilities, including provisions for the physically handicapped as prescribed by the Department Having Jurisdiction<sup>19</sup>. For requirements for persons with disabilities, ICC/ANSI A 117.1, Accessible and Usable Buildings and Facilities, may be used Chapter 11A or 11B of the California Building Code shall be used.

**Note:** ANSI A 117.1 1992 is not adopted by the State of California. [HCD 1/AC] For HCD 1/AC accessibility requirements, refer to the California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter 11B as applicable California Building Code.

The total occupant load shall be determined by minimum exiting requirements. The minimum number of fixtures shall be calculated at fifty (50) percent male and fifty (50) percent female based on the total occupant load.

The occupant load and use of the building or space under consideration shall first be established using the Occupant Load Factor Table A. Once the occupant load and uses are determined, the requirements of Section 412.0 and Table 4-1 shall be applied to determine the minimum number of plumbing fixtures required.

This table applies to new buildings, additions to a building, changes of occupancy or type in an existing building resulting in increased occupant load (example: change an assembly room from fixed seating to open seating.)  
Exception: New cafeterias for employee use are the only use exempted from this requirement.

**Exceptions:**

1. ~~[For HCD 2 & HCD 1/AC]~~ [HCD 1/AC & HCD 2] For applications listed in Sections 108.2.1.2 and 108.2.1.3 regulated by the Department of Housing and Community Development, Each each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department. Covered multi-family dwellings required to be accessible to persons with disabilities shall comply with California Code of Regulations, Title 24, Part 2, Chapter 11A. Permanent buildings in mobilehome parks and special occupancy parks required to be accessible by persons with disabilities, shall comply with California Code of Regulations, Title 24, Part 2, Chapter 11B.

**Exception 2.** ~~[For HCD 1]~~ [HCD 1] Minimum Plumbing Facilities; Limited Density Owner-built Rural Dwellings. For limited density owner-built rural dwellings sanitary facilities, the type, design and number of facilities as required and approved by the local health official shall be provided to the dwelling sites. It shall not be required that such facilities be located within the dwelling.

... [Table 4-1 not shown for clarity. Footnotes follow.]

<sup>1</sup> The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof.

...

<sup>18</sup> A drinking fountain shall not be required in occupancies of 30 or less. When a drinking fountain is not required, then footnotes 3, 12, and 13 are not applicable.

<sup>19</sup> **[BSC, DSA AC, DSA SS, HCD & OSHPD]** In accordance with Sections 108.7 and 301.2, the Authority Having Jurisdiction may approve alternative design criteria when determining the minimum number of plumbing fixtures.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 5 WATER HEATERS**

Adopt entire Chapter 5 as amended.

**508.2** ~~In seismic design categories C, D, E, and F, w~~ Water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one third (1/3) and lower one-third (1/3) of its vertical dimensions. At the lower point, a minimum distance of four (4) inches (102 mm) shall be maintained above the controls with the strapping.

**Note:** **[HCD 1 & HCD 2]** Reference Health and Safety Code Section 19211(a) which addresses new, replacement and existing water heaters.

**510.5.1** ~~[For HCD 1 & HCD 2] Protection from Seismic Damage. The applicable subsection of Health and Safety Code Section 19211(a) is repeated here for clarity and reads as follows:~~

~~**Section 19211(a)** Notwithstanding Section 19100, all new and replacement water heaters, and all existing residential water heaters shall be braced, anchored, or strapped to resist falling or horizontal displacement due to earthquake motion. At a minimum, any water heater shall be secured in accordance with the California Plumbing Code, or modifications made thereto by a city, county, or city and county pursuant to Section 17958.5.~~

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 6 WATER SUPPLY AND DISTRIBUTION**

Adopt entire Chapter 6 as amended.

**601.1** Except where not deemed necessary for safety or sanitation by the Authority Having Jurisdiction, each plumbing fixture shall be provided with an adequate supply of potable running water piped thereto in an approved manner, so arranged as to flush and keep it in a clean and sanitary condition without danger of backflow or cross-connection. Water closets and urinals shall be flushed by means of an approved flush tank or flushometer valve. In jurisdictions which adopt Chapter 16, water closets, urinals, and trap primers in designated nonresidential buildings may be provided with reclaimed water as defined and regulated by Chapter 16 of this code. **[HCD 1 & HCD 2]** For applications listed in Section 108.2.1 regulated by the Department of Housing and Community Development, Exceptions 1, 2 and 3 apply.

**Exceptions:**

1. Listed fixtures which do not require water for their operation and are not connected to the water supply.
2. For limited-density owner-built rural dwellings, potable water shall be available to the dwelling site, although such water need not be pressurized. Where water is not piped from a well, spring, cistern or other source, there shall be a minimum reserve of 50 gallons (189 L) of potable water available.



Where water delivery is pressurized, piping shall be installed in accordance with the provisions of this chapter.

3. Where deemed not necessary for safety or sanitation by the Enforcing Agency.

(2001 CPC Section 601.1.1) ~~601.1.1 [For HCD 1 w/ exceptions & HCD 2 w/o exceptions] Except where not deemed necessary for safety or sanitation by the Administrative Authority, each plumbing fixture shall be provided with an adequate supply of hot and/or cold potable running water piped thereto in an approved manner, so arranged as to flush and keep it in a clean and sanitary condition without danger of backflow or cross connection. Water closets and urinals shall be flushed by means of an approved flush tank or flushometer valve.~~

**Exceptions:**

~~1 [For HCD 1] For limited density owner-built rural dwellings, potable water shall be available to the dwelling site, although such water need not be pressurized. Where water is not piped from a well, spring, cistern or other source, there shall be a minimum reserve of 50 gallons (189 L) of potable water available. Where water delivery is pressurized, piping shall be installed in accordance with the provisions of this chapter.~~

~~2 [For HCD 1] Where deemed not necessary for safety or sanitation by the Administrative Authority.~~

**601.2.2 Nonpotable Water.** — Yellow background with black lettering, with the words "Caution: Nonpotable water, do not drink". ~~[For HCD 1 & HCD 2] A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED [HCD 1 & HCD 2] An international symbol of a glass in a circle with a slash through it shall be provided similar to that provided in figure-Figure 6-1.~~

Each system shall be identified with a colored band to designate the liquid being conveyed, and the direction of normal flow shall be clearly shown. The minimum size of the letters and length of the color field shall conform to Table 6-1.

A colored identification band shall be indicated every twenty (20) feet (6096 mm) but at least once per room, and shall be visible from the floor level.

Where vacuum breakers or backflow preventers are installed with fixtures listed in Table 14-1, identification of the discharge side may be omitted. Each outlet on the nonpotable water line which could be used for special purposes shall be posted as follows:

"Caution: Nonpotable water, do not drink"

**601.2.3 Reclaimed Water.** — Purple (Pantone color #512) background and shall be imprinted in nominal 1/2" (12.7 mm) high, black, upper case letters, with the words "Caution: Reclaimed water, do not drink". ~~[For HCD 1 & HCD 2] A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED An international symbol of a glass in a circle with a slash through it shall be provided similar to that provided in figure Figure 6-1.~~

**601.4 [For HCD 1 & HCD 2]** All sources for drinking water shall be maintained in a clean and sanitary condition. Drinking fountains and portable water dispensers shall not be located in toilet rooms.

**603.4.12 603.4.11 Nonpotable Water Piping.** In cases where it is impractical to correct individual cross-connections on the domestic water line, the line supplying such outlets shall be considered a non-potable water line. No drinking or domestic water outlets shall be connected to the non-potable water line. Whenever possible, all portions of the non-potable water line shall be exposed and all exposed portions shall be properly identified in a manner satisfactory to the Authority Having Jurisdiction. Each outlet on the non-potable water line which may be used for drinking or domestic purposes shall be posted:

**"Caution: Nonpotable water, do not drink". [For HCD 1 & HCD 2] A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED** An international symbol of a glass in a circle with a slash through it shall be provided similar to that provided in figure Figure 6-1.



**Figure 6-1**  
**International Symbol**

---

**604.1.1 [For HCD 1 & HCD 2]** ~~Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Asbestos cement, CPVC, PE or PVC, water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building except as provided for CPVC use pursuant to Section 604.1.2. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.~~

**Section 604.1.12 [HCD 1] Local Authority to Approve CPVC Pipe Within Residential Buildings Under Specified Conditions.**

**[HCD 1 & HCD 2]** ~~For applications listed in Section 108.2.1.1 regulated by the Department of Housing and Community Development, T & T~~ The local responsible building official of any city, county, or city and county, in accordance with the procedures set forth in Chapter 3, ~~(with the exception of Section 301.2.7)~~ may shall authorize by permit the use of CPVC for hot and cold water distribution systems within the interior of residential buildings provided all of the following conditions are satisfied:

**(a) Finding Required.** ~~The building official shall first make a determination that there is or will be the premature failure of metallic pipe if installed in such residential buildings due to existing water or soil conditions.~~

**(a)(b) Permit Conditions.** Any building permit issued pursuant to ~~this~~ Section 604.1.1 shall be conditioned on compliance with the mitigation measures set forth in this section.

**(b)(e) Approved Materials.** Only CPVC plumbing material listed as an approved material ~~in~~, and installed in accordance with this code may be used.

**(c)(d) Installation and Use.** Any installation and use of CPVC plumbing material pursuant to this section shall comply with all applicable requirements of this code and Section 301.0 of Appendix I of this code, Installation Standard for CPVC Solvent Cemented Hot and Cold Water Distributions Systems, IAPMO IS-20-98 IS 20-2005.

**~~(d)~~(e) Certification of Compliance.** Prior to issuing a building permit pursuant to ~~this~~ Section 604.1.1, the building official shall require as part of the permitting process that the contractor, or the appropriate plumbing subcontractors, provide written certification: (1) that is required in subdivision ~~(e)~~(f); and (2) that he or she will comply with the flushing procedures and worker safety measures set forth in Section 301.0 of Appendix I of this code, Installation Standard for CPVC Solvent Cemented Hot and Cold Water Distribution Systems, IAPMO ~~IS-20-98~~ IS 20-2005.

**~~(e)~~(f) Worker Safety.** Any contractor applying for a building permit that includes the use of CPVC plumbing materials authorized pursuant to this section shall include in the permit application a signed written certification stating that:

(1) They are aware of the health and safety hazards associated with CPVC plumbing installations—  ;

(2) They have included in their Illness and Injury Prevention Plan the hazards associated with CPVC plumbing pipe installations; and

(3) The worker safety training elements of their Injury and Illness Prevention Plan meets the Department of Industrial Relation's guidelines.

**~~(f)~~(g) Findings of Compliance.** The building official shall not give final permit approval of any CPVC plumbing materials installed pursuant to ~~this~~ Section 604.1.1 unless he or she finds that the material has been installed in compliance with the requirements of this code and that the installer has complied with the requirements in Section 301.0.4 1.2.1, of Appendix I of this code, Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distribution Systems, IAPMO ~~IS-20-98~~ IS 20-2005.

**~~(g)~~(h) Penalties.** Any contractor or subcontractor found to have failed to comply with the ventilation, glove or flushing requirements of Section 301.0 1.2.2 of Appendix I of this code, Installation Standards for CPVC Solvent Cemented Hot and Cold Water Distribution Systems, IAPMO ~~IS-20-98~~ IS 20-2005 shall be subject to the penalties in Health and Safety Code, Division 13, Part 1.5, Chapter 6 (Section 17995 et seq.). In addition, if during the conduct of any building inspection the building official finds that the ventilation and glove requirements of Section 301.0 1.2.2 of Appendix I of this code, "Special Requirements for CPVC Installation within Residential Buildings", are being violated, such buildings officials shall cite the contractor or subcontractor for that violation.

**604.10** Water pipe and fittings with a lead content which exceeds eight (8) percent shall be prohibited in piping systems used to convey potable water.

**Note:** On or after January 1, 2010, see Section 116875 of the Health and Safety Code for the lead content of pipes, pipe or plumbing fittings, or fixtures intended to convey or dispense water for human consumption

**604.11 PEX. [Not Adopted by HCD]** Cross-linked polyethylene (PEX) tubing shall be marked with the appropriate standard designation(s) listed in Table 14-1 for which the tubing has been listed or approved. PEX tubing shall be installed in compliance with the provisions of this section.

**604.11.1 PEX Fittings. [Not Adopted by HCD]** Metal insert fittings, metal compression fittings, and cold expansion fittings used with PEX tubing shall be manufactured to and marked in accordance with the standards for the fittings in Table 14-1.

**604.11.2 Water Heater Connections. [Not Adopted by HCD]** PEX tubing shall not be installed within the first eighteen (18) inches (457mm) of piping connected to a water heater.

**604.13 PEX-AL-PEX and PE-AL-PE.** Cross-linked polyethylene-aluminum-cross-linked polyethylene (PEX-AL-PEX) and polyethylene-aluminum-polyethylene (PE-AL-PE) composite pipe shall be marked with the appropriate standard designations listed in Table 14-1 for which the piping has been listed or approved. PEX-AL-PEX and PE-AL-PE piping shall be installed in compliance with the provisions of this section.

**[HCD 1 & HCD 2]** PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

**604.13.1 PEX-AL-PEX and PE-AL-PE.** Fittings used with PEX-AL-PEX and PE-AL-PE piping shall be manufactured to and marked in accordance with the standard for the fittings in Table 14-1.

**[HCD 1 & HCD 2]** PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.



**TABLE 6-4<sup>1</sup>**

Material	Water Distribution Pipe and Fittings		Building Supply Pipe and Fittings
	Hot	Cold	
Asbestos – Cement			X
Brass	X	X	X
Copper	X	X	X
Cast Iron	X	X	X
CPVC	X	X	X
Galvanized Malleable Iron	X	X	X
Galvanized Wrought Iron	X	X	X
Galvanized Steel	X	X	X
PE			X
PE-AL-PE	X	X	X
PEX	X	X	X
PEX-AL-PEX	X	X	X
PVC			X

1 [For BSC, DSA/SS & HCD] The use of PEX and PEX-AL-PEX in potable water supply systems is not adopted for applications under the authority of the Building Standards Commission and the Division of State Architect and the Department of Housing and Community Development.

**604.13.2 Water Heater Connections.** PEX-ALPEX or PE-AL-PE tubing shall not be installed within the first eighteen inches (18) (457 mm) of piping connected to a water heater.

[HCD 1 & HCD 2] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

**606.1.3 [Not Adopted by HCD] Mechanically Formed Tee Fittings.**

Mechanically extracted collars shall be formed in a continuous operation consisting of drilling a pilot hole and drawing out the tube surface to form a collar having a height not less than three (3) times the thickness of the branch tube wall.

The branch tube shall be notched to conform with the inner curve of the run tube and shall have two (2) dimple/depth stops to insure that penetration of the branch tube into the collar is of sufficient depth for brazing and that the branch tube does not obstruct the flow in the main line tube. Dimple/depth stops shall be in line with the run of the tube. The second dimple shall be one quarter (1/4) inch (6.35 mm) above the first and shall serve as a visual point of inspection.

All joints shall be brazed in accordance with Section 316.1.7. Soft soldered joints shall not be allowed.

**606.2.1 Copper Water Tube.** Joints in copper tubing shall be made by the appropriate use of approved fittings properly soldered or brazed together as provided in Section 316.1.3 or Section 316.1.7 or by means of approved flared or compression fittings in Section 606.1.1 or 606.1.3. Solder and soldering flux shall conform to the requirements of Section 316.1.3. ~~[The following sentence is not adopted by HCD]~~ Mechanically formed tee fittings shall be made by brazing only and shall conform to the requirements of Section 316.1.7.

~~**606.2.4.2 [For HCD 1 & HCD 2] Joints in PVC pipe shall be made as provided in Section 316.1.6.1, of this Code.**~~

**609.8 ~~[Not adopted by HCD]~~ Low Pressure Cutoff Required on Booster Pumps for Water Distribution Systems.** When a booster pump – excluding a fire pump – is connected to a water service or underground water pipe, a low pressure cutoff switch on the inlet side of the pump shall be installed within five (5) feet (1524 mm) of the inlet. The cutoff switch shall be set for not less than ten (10) psi (68.9 kPa). A pressure gauge shall be installed between the shutoff valve and the pump.

**609.10 ~~[Not adopted by HCD]~~ Water Hammer. [Not adopted by HCD]** All building water supply systems in which quick-acting valves are installed shall be provided with devices to absorb the hammer caused by high pressures resulting from the quick closing of these valves. These pressure-absorbing devices shall be approved mechanical devices. Water pressure absorbing devices shall be installed as close as possible to quick-acting valves.

**TABLE 6-5**

**Water Supply Fixture Units (WSFU) and Minimum Fixture Branch Pipe Sizes <sup>3</sup>**

<b>Appliances, Appurtenances or Fixtures <sup>2</sup></b>	<b>Minimum Fixture Branch Pipe Size <sup>1,4</sup></b>	<b>Private</b>	<b>Public</b>	<b>Assembly <sup>6</sup></b>
Bathtub or Combination Bath/Shower (fill) .....	1/2"	4.0	4.0	
3/4" Bathtub Fill Valve .....	3/4"	10.0	10.0	
Bidet .....	1/2"	1.0		
Clotheswasher.....	1/2"	4.0	4.0	
Dental Unit, cuspidor .....	1/2"		1.0	
Dishwasher, domestic .....	1/2"	1.5	1.5	
Drinking Fountain or Watercooler.....	1/2"	0.5	0.5	0.75
Hose Bibb .....	1/2"	2.5	2.5	
Hose Bibb, each additional <sup>8</sup> .....	1/2"	1.0	1.0	
Lavatory.....	1/2"	1.0	1.0	1.0
Lawn Sprinkler, each head <sup>5</sup> .....		1.0	1.0	
Mobile Home, each (minimum). <del>[Not Adopted by HCD]</del> <sup>9</sup>		12.0		
<b>Sinks</b>				
Bar .....	1/2"	1.0	2.0	
Clinic Faucet.....	1/2"		3.0	
Clinic Flushometer Valve.....				
with or without faucet.....	1"		8.0	
Kitchen, domestic .....	1/2"	1.5	1.5	
Laundry .....	1/2"	1.5	1.5	
Service or Mop Basin .....	1/2"	1.5	3.0	
Washup, each set of faucets .....	1/2"		2.0	
Shower, per head .....	1/2"	2.0	2.0	
Urinal, 1.0 GPF Flushometer Valve.....	3/4"	See Footnote 7		
Urinal, greater than 1.0 GPF Flushometer Valve .....	3/4"	See Footnote 7		
Urinal, flush tank.....	1/2"	2.0	2.0	3.0
Washfountain, circular spray .....	3/4"		4.0	
Water Closet, 1.6 GPF Gravity Tank .....	1/2"	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank .....	1/2"	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve .....	1"	See Footnote 7		
Water Closet, greater than 1.6 GPF Gravity Tank.....	1/2"	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve.....	1"	See Footnote 7		

**Notes:**

1. Size of the cold branch pipe, or both the hot and cold branch pipes.
2. Appliances, Appurtenances or Fixtures not included in this Table may be sized by reference to fixtures having a similar flow rate and frequency of use.
3. The listed fixture unit values represent their load on their cold water service. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections may each be taken as three-quarter (3/4) of the listed total value of the fixture.
4. The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.

5. For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (GPM) and add it separately to the demand (in GPM) for the distribution system or portions thereof.
6. Assembly [Public Use (See Table 4-1)].
7. When sizing flushometer systems see Section 610.10.
8. Reduced fixture unit loading for additional hose bibbs as used is to be used only when sizing total building demand and for pipe sizing when more than one hose bibb is supplied by a segment of water distributing pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.
9. For fixture unit values related to manufactured housing (mobilehomes) in all parts of the State of California, See California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 1278. For fixture unit values related to Special Occupancy Parks in all parts of the State of California, See California Code of Regulations, Title 25, Division 1, Chapter 2.2, Article 5, Section 2278.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## CHAPTER 7 SANITARY DRAINAGE

Adopt entire Chapter 7 as amended.

**701.1.2.2 701.1.2.1 [For HCD 1 & HCD 2] ABS and PVC installations are limited to not more than two stories of areas of residential accommodation.**

**TABLE 7-3**

Drainage Fixture Unit Values (DFU)

	Min. Size Trap and Trap Arm <sup>7</sup>	Private	Public	Assembly <sup>8</sup>
Plumbing Appliance, Appurtenance or Fixture				
Bathtub or Combination Bath/Shower .....	1-1/2"	2.0	2.0	
Bidet.....	1-1/4"	1.0		
Bidet.....	1-1/2"	2.0		
Clothes Washer, domestic, standpipe <sup>5</sup> .....	2"	3.0	3.0	3.0
Dental Unit, cuspidor .....	1-1/4"		1.0	1.0
Dishwasher, domestic, with independent drain .....	1-1/2" <sup>2</sup>	2.0	2.0	2.0
Drinking Fountain or Watercooler (per head) .....	1-1/4"	0.5	0.5	1.0
Food-waste-grinder, commercial .....	2"		3.0	3.0
Floor Drain, emergency.....	2"		0.0	0.0
Floor Drain (for additional sizes see Section 702) .....	2"	2.0	2.0	2.0
Shower single head trap .....	2"	2.0	2.0	2.0
Multi-head, each additional .....	2"	1.0	1.0	1.0
Lavatory, single.....	1-1/4"	1.0	1.0	1.0
Lavatory in sets of two or three.....	1-1/2"	2.0	2.0	2.0
Washfountain.....	1-1/2"		2.0	2.0
Washfountain.....	2"		3.0	3.0
Mobile Home, trap ..... <del>[Not Adopted by HCD]</del> <sup>9</sup> .....	3"	12.0		
Receptor, indirect waste <sup>1,3</sup> .....	1-1/2"		See footnote 1,3	
Receptor, indirect waste <sup>1,4</sup> .....	2"		See footnote 1,4	
Receptor, indirect waste <sup>1</sup> .....	3"		See footnote 1	
<b>Sinks</b>				
Bar .....	1-1/2"	1.0		
Bar .....	1-1/2" <sup>2</sup>		2.0	2.0
Clinical .....	3"		6.0	6.0
Commercial with food waste.....	1-1/2" <sup>2</sup>		3.0	3.0
Special Purpose.....	1-1/2"	2.0	3.0	3.0

Special Purpose.....	2"	3.0	4.0	4.0
Special Purpose.....	3"		6.0	6.0
Kitchen, domestic .....	1-1/2" <sup>2</sup>	2.0	2.0	
(with or without food-waste-grinder and/or dishwasher)				
Laundry.....	1-1/2"	2.0	2.0	2.0
(with or without discharge from a clothes washer)				
Service or Mop Basin.....	2"		3.0	3.0
Service or Mop Basin.....	3"		3.0	3.0
Service, flushing rim .....	3"		6.0	6.0
Wash, each set of faucets .....			2.0	2.0
Urinal, integral trap 1.0 GPF <sup>2</sup> .....	2"	2.0	2.0	5.0
Urinal, integral trap greater than 1.0 GPF.....	2"	2.0	2.0	6.0
Urinal, exposed trap.....	1-1/2" <sup>2</sup>	2.0	2.0	5.0
Water Closet, 1.6 GPF Gravity Tank <sup>6</sup> .....	3"	3.0	4.0	6.0
Water Closet, 1.6 GPF Flushometer Tank <sup>6</sup> .....	3"	3.0	4.0	6.0
Water Closet, 1.6 GPF Flushometer Valve <sup>6</sup> .....	3"	3.0	4.0	6.0
Water Closet, greater than 1.6 GPF Gravity Tank <sup>6</sup> .....	3"	4.0	6.0	8.0
Water Closet, greater than 1.6 GPF Flushometer Valve <sup>6</sup> .....	3"	4.0	6.0	8.0

1. Indirect waste receptors shall be sized based on the total drainage capacity of the fixtures that drain therein to, in accordance with Table 7-4.
2. Provide a 2" (51 mm) minimum drain.
3. For refrigerators, coffee urns, water stations, and similar low demands.
4. For commercial sinks, dishwashers, and similar moderate or heavy demands.
5. Buildings having a clothes washing area with clothes washers in a battery of three (3) or more clothes washers shall be rated at six (6) fixture units each for purposes of sizing common horizontal and vertical drainage piping.
6. Water closets shall be computed as six (6) fixture units when determining septic tank sizes based on Appendix K of this code.
7. Trap sizes shall not be increased to the point where the fixture discharge may be inadequate to maintain their self-scouring properties.
8. Assembly [Public Use (See Table 4-1)].
9. For fixture unit values related to manufactured housing (mobilehomes) in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 1268. For fixture unit values related to Special Occupancy Parks in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2.2, Article 5, Section 2268.

**705.1.1.1 [For HCD 1 & HCD 2] Caulked Joints.** ~~All joints for liquid material are to be reamed to full size and cleaned of all loose materials.~~

**705.1.7 Elastomeric Gasketed and Rubber-Ring Joints.** Elastomeric gasketed and rubber-ring joints shall comply with the applicable Installation Standard listed in Appendix I.

**Exception:** ~~[For HCD 1 & HCD 2] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, c Compliance~~ Compliance with an approved nationally recognized installation standard complying with Section 310.4 of this code and approved by the Administrative Authority Enforcing Agency is acceptable.

**705.1.9 Hubless Cast Iron Pipe Joints.** Joints for hubless cast iron soil pipe and fittings shall conform to appropriate Installation Standards listed in Appendix I and shall not be considered as slip joints.

**Exception:** ~~[For HCD 1 & HCD 2] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, c Compliance~~ Compliance with an approved nationally recognized installation standard complying with Section 310.4 of this code and approved by the Administrative Authority Enforcing Agency is acceptable.

**705.2.5 [For HCD 1 & HCD 2] ABS and PVC Pipe.** ~~[HCD 1 & HCD 2] For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, joints. Joints in ABS and PVC pipe shall be made as provided in Section 316.0, U.P.C 316.1.6 of this code.~~

**710.3.3.1** ~~[For HCD 1 & HCD 2]~~ For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, The the minimum size of any pump or any discharge pipe from a sump having a water closet connected thereto shall be not less than (2) inches (51 mm).

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 8 INDIRECT WASTES**

Adopt entire Chapter 8 without amendments.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 9 VENTS**

Adopt entire Chapter 9 as amended.

~~**903.1.2.2- 903.1.3** [For HCD 1 & HCD 2] ABS or PVC installations are limited to not more than two stories of areas of residential accommodation.~~

**903.3.1** ~~[For HCD 1 & HCD 2]~~ For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, All all-malleable iron vents shall be galvanized.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 10 TRAPS AND INTERCEPTORS**

Adopt entire Chapter 10 as amended.

**1005.0 Trap Seals.** Each fixture trap shall have a water seal of not less than two (2) inches (51 mm) and not more than four (4) inches (102 mm) except where a deeper seal is found necessary by the Authority Having Jurisdiction. Traps shall be set true with respect to their water seals and, where necessary, they shall be protected from freezing.

~~[For HCD 1/AC & HCD 2] Reference Section 101.11 and California Code of Regulations, Title 24, Part 2, Chapter 11A, Housing Accessibility, for disabled access application and requirements. The terminology "persons with disabilities" has replaced the usage of the outdated and incorrect term "handicapped" listed above.~~

**1013.0** ~~[Not Adopted by HCD]~~ **Bottling Establishments.** Bottling plants shall discharge their process wastes into an interceptor which will provide for the separation of broken glass or other solids, before discharging liquid wastes into the drainage system.

**1016.0** ~~[Not Adopted by HCD]~~ **Sand Interceptors.**

**1016.1** ~~[Not Adopted by HCD]~~ **Where Required.**

**1016.1.1** ~~[Not Adopted by HCD]~~ Whenever the discharge of a fixture or drain may contain solids or semi-solids heavier than water that would be harmful to a drainage system or cause a stoppage within the system, the discharge shall be through a sand interceptor. Multiple floor drains may discharge into one sand interceptor.

**1016.1.2 ~~[Not Adopted by HCD]~~** Sand interceptors are required whenever the Authority Having Jurisdiction deems it advisable to have a sand interceptor to protect the drainage system.

**1016.2 ~~[Not Adopted by HCD]~~ Construction and Size.** Sand interceptors shall be built of brick or concrete, prefabricated coated steel or other watertight material. The interceptor shall have an interior baffle for full separation of the interceptor into two (2) sections. The outlet pipe shall be the same size as the inlet size of the oil interceptor, the minimum being three (3) inches (80 mm), and the baffle shall have two (2) openings of the same diameter as the outlet pipe and at the same invert as the outlet pipe. These openings shall be staggered so that there cannot be a straight line flow between any inlet pipe and the outlet pipe. The invert of the inlet pipe shall be no lower than the invert of the outlet pipe. The sand interceptor shall have a minimum dimension of two (2) feet square (0.2 m<sup>2</sup>) for the net free opening of the inlet section and a minimum depth under the invert of the outlet pipe of two (2) feet (610 mm). For each five (5) gallons (18.9 L) per minute flow or fraction thereof over twenty (20) gallons (75.7 L) per minute, the area of the sand interceptor inlet section is to be increased by one (1) square foot (0.09m<sup>2</sup>). The outlet section shall at all times have a minimum area of fifty (50) percent of the inlet section. The outlet section shall be covered by a solid removable cover set flush with the finished floor, and the inlet section shall have an open grating set flush with the finished floor and suitable for the traffic in the area in which it is located.

**1016.3 ~~[Not Adopted by HCD]~~ Separate Use.** Sand and similar interceptors for every solid shall be so designed and located as to be readily accessible for cleaning, shall have a water seal of not less than six (6) inches (152 mm), and shall be vented.

**1017.0 ~~[Not Adopted by HCD]~~ Oil and Flammable Liquids Interceptors.**

**1017.1 ~~[Not Adopted by HCD]~~ Interceptors Required.** All repair garages and gasoline stations with grease racks or grease pits, and all factories which have oily, flammable, or both types of wastes as a result of manufacturing, storage, maintenance, repair, or testing processes, shall be provided with an oil or flammable liquid interceptor which shall be connected to all necessary floor drains. The separation or vapor compartment shall be independently vented to the outer air. If two (2) or more separation or vapor compartments are used, each shall be vented to the outer air or may connect to a header which is installed at a minimum of six (6) inches (152 mm) above the spill line of the lowest floor drain and vented independently to the outer air. The minimum size of a flammable vapor vent shall not be less than two (2) inches (50 mm), and when vented through a sidewall, the vent shall not be less than ten (10) feet (3048 mm) above the adjacent level at an approved location. The interceptor shall be vented on the sewer side and shall not connect to a flammable vapor vent. All oil and flammable interceptors shall be provided with gastight cleanout covers which shall be readily accessible. The waste line shall not be less than three (3) inches (80 mm) in diameter with a full-size cleanout to grade. When an interceptor is provided with an overflow, it shall be provided with an overflow line (not less than two (2) inches (50 mm) in diameter) to an approved waste oil tank having a minimum capacity of five hundred fifty (550) gallons (2080 L) and meeting the requirements of the Authority Having Jurisdiction. The waste oil from the separator shall flow by gravity or shall be pumped to a higher elevation by an automatic pump. Pumps shall be adequately sized and accessible. Waste oil tanks shall have a two (2) inch (50 mm) minimum pump-out connection at grade and a one and one-half (1-1/2) inch (40 mm) minimum vent to atmosphere at an approved location at least ten (10) feet (3048 mm) above grade.

**1017.2 ~~[Not Adopted by HCD]~~ Design of Interceptors.** Each manufactured interceptor that is rated shall be stamped or labeled by the manufacturer with an indication of its full discharge rate in gpm (L/s). The full discharge rate to such an interceptor shall be determined at full flow. Each interceptor shall be rated equal to or greater than the incoming flow and shall be provided with an overflow line to an underground tank. Interceptors not rated by the manufacturer shall have a depth of not less than two (2) feet (610 mm) below the invert of the discharge drain. The outlet opening shall have not less than an eighteen (18) inch (457 mm) water seal and shall have a minimum capacity as follows: where not more than three (3) motor vehicles are serviced and/or stored, interceptors shall have a minimum capacity of six (6) cubic feet (0.2 m<sup>3</sup>), and one (1) cubic foot (0.03 m<sup>3</sup>) of capacity shall be added for each vehicle up to ten (10) vehicles. Above ten (10) vehicles, the Authority Having Jurisdiction shall determine the size of the interceptor required. Where vehicles are serviced only and not stored, interceptor capacity shall be based on a net capacity of one (1) cubic foot (0.03 m<sup>3</sup>) for each one hundred (100) square feet (9.3 m<sup>2</sup>) of surface to be drained into the interceptor, with a minimum of six (6) cubic feet (0.2 m<sup>3</sup>).

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## CHAPTER 11 STORM DRAINAGE

Adopt entire Chapter 11 as amended.

**1101.1 ~~[Not Adopted by HCD]~~ Where Required.** All roofs, paved areas, yards, courts, and courtyards shall be drained into a separate storm sewer system, or into a combined sewer system where a separate storm sewer system is not available, or to some other place of disposal satisfactory to the Authority Having Jurisdiction. In the case of one- and two-family dwellings, storm water may be discharged on flat areas such as streets or lawns so long as the storm water shall flow away from the building and away from adjoining property, and shall not create a nuisance.

**~~1101.1.1 [For HCD 1 & HCD 2] Where Required.~~** ~~All roofs, paved areas, yards, courts, and courtyards shall be drained into a separate storm sewer system. Where a separate storm sewer system is not available, drainage may be combined in the sanitary sewer system, or to some other place of disposal satisfactory to and approved by the Administrative Authority. In the case of one- and two-family dwellings, storm water may be discharged on flat areas such as streets or lawns so long as the storm water shall flow away from the building and away from adjoining property, and shall not create a nuisance.~~

**~~1101.3.1 [For HCD 1 & HCD 2] Material Uses.~~** ~~Rainwater piping placed within the interior of a building or run within a vent or shaft shall be of cast iron, galvanized steel, wrought iron, brass, copper, lead, Schedule 40 ABS DWV, Schedule 40 PVC DWV, stainless steel 304 or 316L (stainless steel 304 pipe and fittings shall not be installed underground and shall be kept at least six inches (152 mm) above ground), or other approved materials, and changes in direction shall conform to the requirements of Section 706.0. ABS or PVC installations are limited to not more than two stories of areas of residential accommodation.~~

**~~1101.3.3. [For HCD 1 & HCD 2]~~** ~~ABS or PVC installations are limited to not more than two stories of areas of residential accommodation.~~

**1101.3 Material Uses.** Rainwater piping placed within the interior of a building or run within a vent or shaft shall be of cast iron, galvanized steel, wrought iron, brass, copper, lead, Schedule 40 ABS DWV, Schedule 40 PVC DWV, stainless steel 304 or 316 L (stainless steel 304 pipe and fittings shall not be installed underground and shall be kept at least six inches (152 mm) aboveground), or other approved materials, and changes in direction shall conform to the requirements of Section 706.0. ABS and PVC DWV piping installations shall be installed in accordance with IS 5, IS 9, and Chapter 15 "Firestop Protection." Except for individual single-family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index or not more than 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface-Burning Characteristics of the Building Materials (see the Building code standards based on ASTM E-84 and ANSI/UL 723.).

**[HCD 1 & HCD 2]** ABS or PVC installations are limited to not more than two stories of areas of residential accommodation.

### 1101.5 Subsoil Drains.

**1101.5.1** Subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade. Such subsoil drains may be positioned inside or outside of the footing, shall be of perforated or open-jointed approved drain tile or pipe not less than three (3) inches (80 mm) in diameter, and shall be laid in gravel, slag, crushed rock, approved three-quarter (3/4) inch (19.1 mm) crushed recycled glass aggregate, or other approved porous material with a minimum of four (4) inches (102 mm) surrounding the pipe on all sides. Filter media shall be provided for exterior subsoil piping.

**1101.5.1.1 [For HCD 1 & HCD 2] Exception: [For HCD 1 & HCD 2]** For applications listed in Sections 108.2.1 through 108.2.1.3 regulated by the Department of Housing and Community Development, s Subsoil drains are mandatory only. When when required by the Administrative Authority due to geological conditions, subsoil drains shall be provided around the perimeter of buildings having basement, cellars, or crawl spaces or floors below grade. Such subsoil drains may be positioned inside or outside of the footing, shall be of perforated, or open-jointed approved drain tile or pipe not less than three (3) inches (76 mm) in diameter, and shall be laid in gravel, slag, crushed rock, approved three-quarter (3/4) inch (19.1 mm) crushed recycled glass aggregate, or other approved porous material with a minimum of four (4) inches (102 mm) surrounding the pipe on all sides. Filter media shall be provided for exterior subsoil piping.

**1102.1.2** The inside of conductors installed above ground level shall be of seamless copper water tube, Type K, L, or M; Schedule 40 copper pipe or Schedule 40 copper alloy pipe; Type DWV copper drainage tube; service weight cast-iron soil pipe or hubless cast-iron soil pipe; standard weight galvanized steel pipe; Stainless Steel 304 or 316L (stainless steel 304 pipe and fittings shall not be installed underground and shall be kept at least 6 inches (152 mm) above ground); or Schedule 40 ABS or Schedule 40 PVC plastic pipe.

**[HCD 1 & HCD 2]** ABS or PVC installations are limited to not more than two stories of areas of residential accommodation.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 12 FUEL PIPING**

Adopt entire Chapter 12 as amended.

**1216.4** The size of the supply piping outlet for any gas appliance shall not be less than one-half (1/2) inch (12.7mm). ~~**[The following sentence is no adopted by HCD]**~~ The minimum size of any piping outlet for a mobile home shall be three-quarter (3/4) inch (19.1 mm).

~~*Fuel piping for manufactured homes, mobilehomes, and recreational vehicles are sized in accordance with California Code of Regulations, Title 25, Chapter 3 and the California Health and Safety Code, Division 13, Part 2, Mobilehome/Manufactured Housing Act of 1980.*~~

~~**1216.4.1 [For HCD 1 & HCD 2] Fuel Piping for Manufactured Homes, Mobilehomes, and Recreational Vehicles.** *Fuel piping for manufactured homes mobilehomes, and recreational vehicles are sized in accordance with California Code of Regulations, Title 25, Chapter 3 and the California Health and Safety Code, Division 13, Part 2, Mobilehome/Manufactured Housing Act of 1980.*~~

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 13 HEALTH CARE FACILITIES AND MEDICAL GAS AND VACUUM SYSTEMS**

Chapter 13 is not adopted.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## **CHAPTER 14 MANDATORY REFERENCED STANDARDS**

Adopt entire Chapter 14 without amendments.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.



## CHAPTER 15 FIRESTOP PROTECTION

Adopt entire Chapter 15 without amendments.

~~1501.2 [For HCD 1 & HCD 2] Any provisions of this chapter adopted by the State Fire Marshal shall be applicable to structures subject to HCD 1 and/or HCD 2 (See Section 101.11.1).~~

### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## CHAPTER 16 – PART I GRAY WATER SYSTEMS

Chapter 16 Part I is not adopted.

### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## CHAPTER 16 – PART II RECLAIMED WATER SYSTEMS

Chapter 16 Part II is not adopted.

### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## APPENDIX CHAPTER 1

Adopt only those sections listed in the Matrix Adoption Tables.

## APPENDIX A RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

Adopt entire Appendix A as amended.

TABLE A-2

### Water Supply Fixture Units (WSFU) and Minimum Fixture Branch Pipe Sizes <sup>3</sup>

**Table A-2 Note:** ~~[For HCD 1 & HCD 2]~~ See Chapter 6, Section 610.7, Table ~~6-4~~ 6-5, U.P.C., for equivalent fixture units.

Appliances, Appurtenances or Fixtures <sup>2</sup>	Minimum Fixture Branch Pipe Size <sup>1,4</sup>	Private	Public	Assembly <sup>6</sup>
Bathtub or Combination Bath/Shower (fill) .....	1/2"	4.0	4.0	
3/4" Bathtub Fill Valve .....	3/4"	10.0	10.0	
Bidet .....	1/2"	1.0		
Clotheswasher .....	1/2"	4.0	4.0	
Dental Unit, cuspidor .....	1/2"		1.0	
Dishwasher, domestic .....	1/2"	1.5	1.5	
Drinking Fountain or Watercooler.....	1/2"	0.5	0.5	0.75

**Final Express Terms**

**41 of 44**

**January 16, 2007**

**2006 UPC / 2007 CPC**

**Housing and Community Development (HCD)**

Hose Bibb .....	1/2"	2.5	2.5	
Hose Bibb, each additional <sup>7</sup> .....	1/2"	1.0	1.0	
Lavatory.....	1/2"	1.0	1.0	1.0
Lawn Sprinkler, each head <sup>5</sup> .....		1.0	1.0	
Mobile Home, each (minimum).. <del>[Not Adopted by HCD]</del> <sup>8</sup>		12.0		
<b>Sinks</b>				
Bar .....	1/2"	1.0	2.0	
Clinic Faucet.....	1/2"		3.0	
Clinic Flushometer Valve.....				
with or without faucet.....	1"		8.0	
Kitchen, domestic .....	1/2"	1.5	1.5	
Laundry .....	1/2"	1.5	1.5	
Service or Mop Basin .....	1/2"	1.5	3.0	
Washup, each set of faucets .....	1/2"		2.0	
Shower, per head .....	1/2"	2.0	2.0	
Urinal, 1.0 GPF Flushometer Valve.....	3/4"	3.0		
Urinal, greater than 1.0 GPF Flushometer Valve .....	3/4"	4.0		
Urinal, flush tank.....	1/2"	2.0	2.0	3.0
Washfountain, circular spray .....	3/4"		4.0	
Water Closet, 1.6 GPF Gravity Tank .....	1/2"	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank .....	1/2"	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve .....	1"	5.0		
Water Closet, greater than 1.6 GPF Gravity Tank.....	1/2"	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve.....	1"	7.0		

**Notes:**

1. Size of the cold branch pipe, or both the hot and cold branch pipes.
2. Appliances, Appurtenances or Fixtures not included in this Table may be sized by reference to fixtures having a similar flow rate and frequency of use.
3. The listed fixture unit values represent their load on their cold water service. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections may each be taken as three-quarter (3/4) of the listed total value of the fixture.
4. The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.
5. For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (GPM) and add it separately to the demand (in GPM) for the distribution system or portions thereof.
6. Assembly [Public Use (See Table 4-1)].
7. Reduced fixture unit loading for additional hose bibbs as used is to be used only when sizing total building demand and for pipe sizing when more than one hose bibb is supplied by a segment of water distributing pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.
8. For fixture unit values related to manufactured housing (mobilehomes) in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 1278. For fixture unit values related to Special Occupancy Parks in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2.2, Article 5, Section 2278.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.  
Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

**APPENDIX B  
EXPLANATORY NOTES ON COMBINATION WASTE AND VENT SYSTEMS**

Appendix B is not adopted.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.  
Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## APPENDIX D SIZING STORMWATER DRAINAGE SYSTEMS

Adopt entire Appendix D without amendments.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## APPENDIX E MANUFACTURED/MOBILE HOME PARKS AND RECREATIONAL VEHICLE PARKS

Appendix E is not adopted.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## APPENDIX F FIREFIGHTER BREATHING AIR REPLENISHMENT SYSTEMS

Appendix F is not adopted.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## APPENDIX I INSTALLATION STANDARDS

Adopt entire Appendix I as amended.

### INSTALLATION STANDARD FOR CPVC SOLVENT CEMENTED HOT AND COLD WATER DISTRIBUTION SYSTEMS IAPMO IS 20-4998 2005

~~Section 301.0 Special Requirements for CPVC Installation Within Residential Buildings Only. [HCD 1]~~

#### **1.2 Special Requirements for CPVC Installation within Residential Structures. [HCD 1]**

*In addition to the other requirements in the California Plumbing Code and this Appendix for the ~~Installation Standards~~ for installation of CPVC Solvent Cemented Hot and Cold Water Distributions Systems, all installations of CPVC pipe within residential structures shall meet the following:*

**301.0.1 1.2.1 Flushing Procedures.** ~~301.0.1.1~~ All installations of CPVC pipe within residential structures shall be flushed twice over a period of at least one (1) week. The pipe system shall be first flushed for at least 10 minutes and then filled and allowed to stand for no less than 1 week, after which all the branches of the pipe system must be flushed long enough to fully empty the contained volume. At the time of the fill, each fixture shall have a removable tag applied stating:

*"This new plumbing system was first filled on (date) by (name). The California Department of Housing and Community Development requires that the system be flushed after standing at least one week after the fill date specified above. If the system is used earlier than one week after the fill date, the water must be allowed to run for at least two minutes prior to use for human consumption. This tag may not be removed prior to flushing, except by the homeowner."*

**301-0.2 1.2.2 Worker Safety Measures. 301-0.2.4** Mechanical ventilation sufficient to maintain exposures below the relevant exposure limits established by state regulations shall be provided in enclosed spaces. This ventilation shall be directed at the breathing zone of the worker installing the pipe. Where mechanical ventilation is not practical, respirators, suitable for organic vapors, shall be used. For the purpose of this subdivision, and enclosed space is defined as:

- (a) A space less than 100 square feet of floor area under a ceiling with a height of 10 feet or less, and which does not have openings (consisting of doors, windows, or unfinished walls) on at least two sides;
- (b) Crawl spaces having a height of less than three feet;
- (c) Enclosed attics that have a roof and ceiling; or
- (d) Trenches having a depth greater than ~~twenty-four~~ 24 inches.

**301-0.2.2** Installers of ~~CPCG~~ CPVC pipe within residential structures shall use non-latex thin gauge (4 millimeters) nitrile gloves, or other gloves providing an equivalent or better degree of protection during the installation of the CPVC plumbing system. Gloves shall be provided to all workers by the contractor, or plumbing subcontractor, and shall be replaced upon contamination by cements.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

#### **APPENDIX K PRIVATE SEWAGE DISPOSAL SYSTEMS**

Adopt entire Appendix K without amendments.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

#### **APPENDIX L ALTERNATE PLUMBING SYSTEMS**

Appendix L is not adopted.

**NOTE:**

Authority Cited: Health and Safety Code Sections 17040, 17921, 17922, 18300, 18865 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.